THE ACCEPTANCE AND FEASIBILITY OF ALTERNATIVES TO A CENTRALIZED SUBSTITUTE TEACHER SYSTEM AT THE HIGH SCHOOL LEVEL

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An abstract of a Dissertation by
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The problem. Centralized substitute teacher systems are widely used in urban high schools, but without instructional effectiveness. With the demand for greater accountability and the increased use of school-based management, there is a need to investigate the acceptance and feasibility of alternatives to this system.

Procedures. Alternatives to a centralized substitute teacher system in high schools were investigated in an urban district in a midwestern state. A focus group of teachers and administrators generated eight alternatives. Alternatives were defined as methods of covering for absent teachers without using substitutes from the district substitute teacher pool. Absences considered were limited to those of five days or fewer in duration. A critical component of this investigation was the assumption that monies could be returned to schools for their coverage for absent teachers.

Teachers, administrators and students were surveyed to determine the attractiveness of alternatives generated by the focus group. Two high schools, the smallest and largest in the district, were selected for further study. Department chairpersons and administrators were interviewed to determine their interest in using alternatives and problems they anticipated in change. Feasibility of implementing alternatives was based on current cost established by analyzing teacher absences for the 1990-1991 school year.

Findings. Alternatives were identified which educators wish to implement. The preferred alternative was substitute teachers assigned specifically to high schools. High schools differed in preference for alternatives as did subject area departments. Interviewees believed teacher involvement was important in the selection of alternatives and findings support this belief.

Conclusions. No alternative was able to meet all of the needs of either high school, but, in combination, the use of alternatives appears feasible. Centralized

substitute teacher systems continue to be needed for long term absences and days of high absenteeism. A model was developed to illustrate the use of alternatives along with the centralized system.

Recommendations. Further investigation is needed to create improved methods of predicting absence trends for planning. The use of alternatives should be evaluated for their instructional effectiveness and effect on professional climate. There is a need to determine the acceptance and feasibility of alternatives at other instructional levels.

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INTRODUCTION

The use of substitute teachers to replace absent teachers is an established and accepted practice in public education. In large school districts, managing the substitute teacher system is usually a centralized administrative function of the school district. Koelling (1983) found that 87% of school districts with 10,000 or more students maintained a district level pool of substitute teachers for classroom coverage when regular teachers were absent. Case (1986) and Rundall (1986) reported the continued use of a district managed and assigned pool of substitute teachers for large school districts.

Substitute teachers serve the important purpose of having a responsible adult supervise students when teachers are absent. While substitutes meet the school's supervisory needs, their ability to maintain a quality level of instruction is often questioned. In practice, the title of substitute teacher may relate more to minimal qualifications for employment than the functions performed in the classroom.

Olson (1971) was the first to research the effectiveness of substitute teachers. Using the Indicator-of-Quality scale as a measure of effectiveness, he found

significant differences in interpersonal regard, group activity, individualization, and creativity between regular teachers and substitute teachers. At all levels of instruction, substitute teachers were less effective on these measures of quality than were regular teachers. Differences were dramatically greater at the secondary level than at the elementary level.

Clifton and Rambaran (1987) conducted a qualitative study of substitute teachers in elementary, junior high, and senior high schools. As a result of their findings, the authors termed substitute teaching a marginal activity, by which they meant that under the best of circumstances substitute teachers confront conditions that are beyond their control and prevent them from being instructionally effective.

Willerman and McGuire (1986) provide the only research demonstrating the instructional effectiveness of substitute teachers. They studied substitutes for teachers of behavior-disordered students; the substitute teachers were trained in the behavior management procedures used in a special school. Willerman and McGuire (1986) found that these substitute teachers were effective if provided specific training on the procedures used in classrooms throughout the special school. In common practice, however, substitute teachers rarely receive training on the specific

procedures used in a classroom prior to an assignment. In a survey of substitute teachers, Ebmeier and Freeman (1979) found that lack of prior knowledge of the classroom to be served was common.

A dominate theme in the substitute teacher literature is the poor classroom management of substitutes reported by both substitute teachers and administrators (Barrios & Kirkland, 1978; Ebmeier & Freeman, 1979; Meara, 1983). Journal articles with titles such as "Ten ways to prevent chaos" (Garwood, 1976) and more recently "Eight ways to make sure substitute teachers aren't babysitters" (Drury, 1988), indicate the common perception of problems of classroom management and limited instructional benefit. Stanley (1991) provides suggestions on behaviors substitute teachers must manifest to manage classroom effectively, but fails to give any evidence that substitutes are effective.

I (Caster, 1991) assessed teacher and administrator perceptions of substitute teacher effectiveness in a midwestern urban school district by surveying 865 teachers and 74 administrators. On the construct of instructional effectiveness used, teachers and administrators perceived substitute teachers to be instructionally ineffective. Both groups agreed that there is a need to investigate alternative approaches to the use of substitute teachers when regular teachers are absent for a short duration.

Need for the Study

Research refutes any assumption that substitute teachers are effective instructionally (Clifton & Rambaran, 1987; Olson, 1971). The opinion of teachers and administrators is consistent with that research (Caster, 1991). Also, the use of centralized substitute teacher systems continues to be the accepted practice in large districts (Case, 1986; Ebmeier & Freeman, 1979; Koelling, 1983; Meara, 1983; Rundall, 1986). As the 21st century approaches, critics are demanding that education abandon outdated practices and recreate schools to meet the needs of a new generation of students. The continuation of unsupported practices that consume limited resources without producing instructional benefit is contradictory to clear societal expectations for accountability and positive system change. The Iowa Business-Education Roundtable (1991), the America 2000 report (U.S. Department of Education, 1991), the U.S. Department of Labor (1991), and a host of other organizations and individuals have all expressed this obligation for accountability and system change.

District level responsibility for servicing the needs of schools when teachers are absent has a long tradition (Koelling, 1983; Stoops, Rafferty, & Johnson, 1975). It is not surprising then, that individual building leaders do not focus on the issue of alternatives to a centralized

substitute teacher system. The recent trend of school-based management provides a timeliness to the study of alternatives to centralized substitute teacher systems.

School-based management is an approach that gives greater authority on program design and the use of resources to local building staffs (Herman, 1992; Lindelow & Heynderickx, 1989). Prior to school-based management, local building leaders had, or perceived they had, limited opportunity to experiment with approaches unique to their specific school site. Expenditures for substitute teachers are identifiable and as a consequence of school-based management, alternatives to a centralized substitute teacher system can be evaluated to determine if greater benefit to students and the school is possible using the same or less money.

School administrators wanting to consider planned alternatives to a centralized substitute teacher system have no information available to guide them. However, the discrepancy between supply of substitute teachers and the needs of schools (Meara, 1983; Stoops et al., 1975) suggests that alternatives have been created as a matter of necessity rather than as part of a plan. Caster (1991) and Meara (1983) identify six methods schools have used to supervise students when substitute teachers are unavailable: the use of administrators, teachers during their planning time,

special program teachers such as Chapter I or special education resource teachers, teacher associates, support personnel including counselors and nurses, and assignment of students to other classes. However, these are responses of schools because of the failure of the current centralized system to deliver the substitute teachers needed which result in no re-allocation of resources to the building. They provide no opportunity to consider how resources might be better spent.

Current school reform efforts imply that organizational changes will occur in the public schools. The use of existing centralized substitute teacher systems thwarts change by maintaining and perpetuating the existing organizational structures. Senge (1990), in The fifth discipline (p. 40), describes structure as "the basic interrelationships that control behavior." The centralized substitute teacher system controls behaviors at the district office level and within the individual school buildings. The district office recruits, selects, and assigns substitute teachers, and individual schools request substitute teachers when regular teachers are absent. As I interpret Senge (1990), unless the interrelationships between the central office and local schools are redefined, there will be no opportunity to improve upon the current centralized substitute teacher system.

Drucker (1992) indicates that organizations that grow quickly must be prepared to change. He includes public education in that category because of its expanded purposes and the increasingly diverse population being served. Change within educational organizations, according to Drucker (1992), is needed in both form and structure. I believe how classes are covered when teachers are absent is one of the areas in which educational change is needed.

Statement of the Problem

The limitations of substitute teachers Olson (1971) and Clifton and Rambaran (1987) describe are reflected in the opinions of teachers and administrators (Caster, 1991). However, information is lacking for educators to adequately select and implement alternatives to the traditional centralized substitute teacher system that provides substitute teachers to schools. Without more information, the centralized system may remain unchanged because the political problems encountered from system change will most likely be perceived as too great in contrast to the possible benefits for experimentation to occur. Also, without greater knowledge, the solution to existing deficiencies may be viewed as merely replicating the centralized model within individual schools, a change that cannot be viewed as producing improved results. Alternatives to the use of a

centralized substitute teacher system must be investigated and tested for acceptance and feasibility, with the hope of discovering a new model for the process of providing instruction when teachers are absent.

I propose to describe alternatives which schools can use in place of a centralized substitute teacher system. This is an exploratory study to provide information on high schools, their need for substitute teachers, and important variables related to alternatives to a centralized substitute teacher system. This study will investigate and describe strategies for examining school needs and the feasibility of change. It will also provide a basis for future research.

Four questions guide the investigation:

1. What alternatives to the use of a centralized substitute teacher system will a selected group of educators identify?
2. What are the opinions of high school students, teachers and administrators concerning the alternatives the group identified to the use of a centralized substitute teacher system?
3. What do high school teachers and administrators see as the processes required for enactment and implementation of these alternatives to a centralized substitute teacher system?

4. What is the feasibility of using these alternatives to a centralized substitute teacher system in a large and small high school?

While much of the literature concerning use of substitutes relates to effectiveness of instruction, I was not concerned with instruction, but rather with alternatives to the centralized system. Sufficient information exists to conclude that the current system is not instructionally effective (Caster, 1991; Clifton & Rambaran, 1987; Olson, 1971) and significant improvement is not likely. Thus, I hoped to identify information that would permit a shift from the past paradigm regarding how schools cover for teacher absences to something that will better meet the needs of schools.

Limitations of the Study

I investigated these questions in an urban school district in a rural state. Research indicates that variations exist in the personnel policies of school organizations and the uniformity of classification and reporting of data related to absences (Goodman & Atkin, 1984). Limiting the investigation to a single school district makes it possible to describe more precisely the personnel policies and practices present in the environment. Also, interview responses from high school teachers and

administrators can be better interpreted through the perspective of a single school district. Comparison of the cost implications of adoption of alternatives in a large and small high school is enhanced by the use of the same standards for economic comparison.

This investigation is limited to the study of high schools and the students, teachers, and administrators in those environments. Olson (1971) indicated that substitute teacher effectiveness is lower at the high school level than at the middle and elementary level. I (Caster, 1991) found that high school teachers, compared with middle and elementary school teachers, were the most dissatisfied with the effectiveness of substitute teachers and the most interested in identifying alternatives to the use of substitute teachers. In the absence of other research related to alternatives to the use of substitute teachers, it seems advisable for an exploratory study to first examine the area where there is the greatest interest in change and where, as a function of the size of faculty, there appears to be the greatest opportunity for acceptable and economically feasible alternatives to exist.

This investigation is limited to the study of alternatives to the use of substitute teachers for five consecutive days or fewer. Long-term absences of six consecutive days or more because of major accident or

illness, approved leaves of absence, or absences for extended periods of time for other reasons are excluded. Substitute teachers in these circumstances are generally hired on a long-term basis and thus can come to know the students, the school environment, and classroom rituals, factors Clifton and Rambaran (1987) argue are important for effectiveness.

Definition of Terms

The following definitions apply in this study:

Substitute Teachers: Substitute teachers are certified teachers assigned by the school district to individual schools to replace absent teachers when needed. They are employed on a temporary basis and paid a daily rate. As temporary employees they receive no fringe benefits. There is no obligation on the part of a school district to use teachers who wish to substitute and there is no obligation on the part of substitute teachers to be available when requested to provide services. Recruitment, selection, orientation, and assignment of substitute teachers is done by the school district.

Absences of a short duration: Absences of a short duration are operationally defined as five or fewer consecutive days of teacher absence.

Centralized substitute teacher systems: A centralized substitute teacher system is one in which a school district performs the functions of recruitment, selection, orientation, and assignment of substitute teachers. The role of individual schools is primarily that of communicating the need for substitute teachers to the substitute teacher office and submitting reports to the payroll department.

Alternatives to centralized substitute teacher systems: Alternatives to the use of centralized substitute teacher systems are operationally defined as methods of providing for student supervision and class coverage when teachers are absent that do not require schools to request teachers from a centralized substitute teacher system.

High schools: High schools are those schools with grades 9, 10, 11, and 12.

Teacher absences: Teacher absences are those occasions when a teacher is absent from a classroom because of illness, professional involvement, family emergencies, or other reasons.

Summary

Public schools have traditionally used substitute teachers to replace absent teachers. In large districts, substitute teachers are typically recruited, selected, and

assigned by a central office (Koelling, 1983). Research (Clifton & Rambaran, 1987; Olson, 1971) indicates that the traditional use of substitute teachers is not effective instructionally. In addition, teachers and administrators themselves do not believe that substitute teachers are instructionally effective and they desire that alternatives to the traditional use of substitute teachers be investigated (Caster, 1991). Voices at the state and federal levels are urging that schools become more effective without additional resources. The abandonment of practices that consume resources without returns is essential to schools.

An absence of information on planned alternatives to the use of centralized substitute teacher systems makes it difficult for schools to adopt new practices. This exploratory study was conducted to provide a basis for change. It identified alternatives to the use of a centralized substitute teacher system, determined the acceptability of those alternatives, and identified how they might be enacted. Economic implications of the use of alternatives in a large and small high school are described.

Chapter 2

REVIEW OF LITERATURE

The centralized substitute teacher system has been the prevailing method for schools to cover for absent teachers. Since it is the norm, little information is available in the literature about alternatives to this system. This review of literature, then, concentrates on topics that relate to that system and why alternatives should be sought. This review also includes a description of centralized substitute teacher systems and how such systems operate in large districts. If substitute teachers were instructionally effective, there would be no need to search for alternatives to their use. Consequently, research about the instructional effectiveness of substitute teachers is reviewed.

Most of the information in the limited literature on alternatives to substitutes reflects strategies used when substitute teachers are unavailable. But, it is helpful to see how schools respond when the centralized substitute teacher system fails to provide the number of substitute teachers needed. The few planned approaches for covering classes without substitute teachers are described.

The cost of substitute teachers is the last topic discussed. It is important because expenditures for

substitute teachers create the upper limit for financing alternatives to a centralized substitute teacher system.

Organization of Substitute Teacher Systems in Large Districts

Koelling (1983) investigated the substitute teacher policies and procedures in the 19-state area of the North Central Association of Colleges and Schools. He found that 87% of the school districts with 10,000 or more students maintained a pool of substitute teachers managed at the district level. The use of a district level managed system of substitute teachers has become common for large school districts and has been reported by Ebmeier and Freeman (1979), Case (1986), and Rundall (1986).

In a guide written for school administrators, Stoops et al. (1975) describe the traditional system for supplying substitute teachers to schools in large districts. Basic responsibility for a substitute teacher system usually rests with the department of human resources. This department recruits, selects, and assigns substitute teachers to local schools when they are needed. The central offices of districts create procedures for local schools to use in notifying the substitute teacher office of needs for substitute teachers. With the advent of telephone recording equipment, much of the information transmitted to the

substitute teacher office by schools and substitute teachers is recorded and retrieved later by that office. This increases efficiency but decreases the amount of specific information provided by the school to the substitute office on the competencies needed by the substitute teacher. In turn, this procedure decreases the amount of information provided to the substitute teacher on the nature of the assignment.

Since most teacher absences are unplanned, substitute teachers receive their assignment either in the late evening before or the morning of the assignment. Even for scheduled absences, substitutes are rarely contacted more than one day in advance (McNulty, 1991). Substitute teachers receive only general information about their assignment: the name of the absent teacher, type of assignment, and the name of the school. Detailed information about the nature or content of the instruction to be provided is usually unavailable to the substitute teacher. Typically, the substitute teacher remains in the assignment until the regular teacher returns.

This system does not guarantee that local schools always have all of their needs for substitute teachers met by the substitute teacher office. Supply does not always equal the demand for substitute teachers in a district. Because of this problem, Stoops et al. (1975) recommend that

local schools develop some plan for the occasions when there are not enough substitute teachers available to meet the demand for them in a school. The severity of this problem varies from community to community. Meara (1983) reported that in the Chicago schools the supply of substitute teachers was inadequate to meet the demand for them between 20 and 30% of the time with rate of non-coverage being even greater in inner-city schools.

Research on Instructional Effectiveness of Substitute Teachers

Olson (1971) is the only researcher to quantify the effectiveness of substitute teachers. His research used the Indicator-of-Quality scale as a measure of instructional effectiveness. The scale assesses teacher behaviors related to four constructs: interpersonal regard, group activity, individualization, and creativity. The higher the score on the Indicator-of-Quality scale, the more positive the learning environment is assumed to be.

Olson (1971), using trained observers, observed teachers in regular elementary and secondary classrooms. He conducted a second observation of substitute teachers in the same classrooms. Regular elementary teachers obtained a mean score on Indicator-of-Quality of 6.12 while the substitute teachers obtained a mean score of only 1.98 on

the scale. The discrepancy was even greater at the secondary level. At that level, the regular secondary teachers obtained a mean score of 5.01 while the substitute teachers had a mean score of only 0.27.

Two studies (Case, 1986; Willerman & McGuire, 1986) focus on the use of substitute teachers in special education. The uniqueness of special education students and the amount of individualization seem to create problems different from those found in general education. Substitutes are often required to manage many lessons or behavior management plans in a classroom as opposed to one for the entire class. Also, every student in special education must have an individual education plan (IEP) that is developed in a meeting with parents and other prescribed participants. The IEP meeting and other similarly required meetings potentially increase the need for substitute teachers.

While most teacher absences are unanticipated, Case (1986) described the use of substitute teachers in a different situation, one where teachers knew they were going to be absent from the classroom. Substitute teachers were employed so special education teachers could attend evaluation, appraisal, and review conferences. Following the conferences, the special education teachers were asked if students received quality teaching in their absence. The

study included 175 special education teachers and 59% of the teachers believed that quality instruction was provided by the substitute teacher. However, 25% of the teachers were uncertain that quality instruction was provided and 7.7% of the teachers felt that quality instruction was not provided. The remaining teachers (8%) elected not to use substitute teachers because they felt that substitute teachers were less competent than the special education teacher associates in maintaining the classes.

It would seem that in Case's study (1986), optimum conditions existed for substitute teachers to be instructionally effective. Teachers knew ahead of time that they were going to be absent and that a substitute teacher would be provided. Substitute teachers knew that they were going to be assigned to a special education class. Yet, even in this more ideal situation, one that rarely occurs in schools, only about 60% of the teachers thought that quality instruction was provided.

Willerman and McGuire (1986) report the most positive performance of substitute teachers. The setting was a special school for students with behavior disorders. Substitute teachers were trained to use the behavior management procedures used by all of the teachers. The measure of substitute teacher effectiveness used was a comparison of performance points earned by students when the

regular teacher was present as opposed to when a substitute teacher was in the classroom. The researchers observed a consistency in points awarded to students regardless of the presence of the regular teacher or substitute teacher.

The study of Willerman and McGuire (1986) can be contrasted with the situation that most substitute teachers experience. They provided "An intensive in-service program" (p. 235) on the specific procedures for the classes to which the substitutes were assigned. Also, to ensure that the substitute teachers understood the procedures on which they were trained, they were visited in the classroom and feedback provided to them. While this is a sound procedure, this type of support is generally not provided to substitute teachers (Ebmeier & Freeman, 1979).

Willerman and McGuire (1986, p. 236) indicate possible reasons for their positive results. One of those is that: "The possible increase of the substitute familiarity with the students may have increased the substitute effectiveness." Clifton and Rambaran (1987) cite familiarity with the students and knowledge of the classroom procedures as two important issues related to the instructional effectiveness of substitute teachers. Their study provides the greatest insight into the problems that substitute teachers encounter and the reasons they are not instructionally effective.

Clifton and Rambaran (1987) used qualitative methods consisting of observations, interviews, and student essays to study substitute teachers at the elementary, junior high, and high school levels. They observed 9 substitute teachers and interviewed 30 substitute teachers, 4 superintendents, 5 assistant superintendents, 10 principals, 4 vice-principals, 20 regular classroom teachers, and 23 students. Their purpose was to offer an explanation for substitute teaching being a marginal activity, that is, an activity where a "person's role is not perceived as being related to the desired goals of the institution, and the person feels like a stranger" (p. 314).

Two major reasons are offered as to why substitute teachers are not effective (Clifton & Rambaran, 1987): substitute teachers lack a source of authority in the classroom and are unfamiliar with classroom rituals. Source of authority for substitute teachers is limited because the traditional authority, the classroom teacher, is absent, and authority is not automatically transferred to the substitute. Obtaining a source of authority is difficult because students know the substitute teacher will be with them only a short time, usually for one day.

Rituals, the routines, methods, and procedures of the classroom are unknown to the substitute teacher. His or her failure to embrace the rituals of the classroom creates an

incongruency between student expectations and reality, and this incongruency influences student behavior. According to Clifton and Rambaran (1987), unfortunately for a substitute teacher, even very acceptable, but different routines, methods, or procedures, alter a classroom environment and create discomfort for students.

Clifton and Rambaran (1987, p. 325) effectively summarize the situation substitute teachers face. They state:

> Basically, it is argued that substitute teaching is a marginal situation in which substitute teachers do not fill roles that allow them to adequately legitimate their behavior. More specifically, they are not seen as having authority in the school, and they do not know the rituals of the classroom. Hence substitute teachers find themselves in a situation that is not integrated within the formal structure of the school, and as a result, they cannot contribute meaningfully to the successful achievement of the desired goals. In other words, substitute teachers are in a marginal situation.

Little research is available to suggest that substitute teachers are effective instructionally. Studies by Case (1986) and Willerman and McGuire (1986) present the strongest arguments to suggest that substitute teachers can be instructionally effective. However, even under somewhat controlled and optimum conditions, Case (1986) is able to report that only 60% of the teachers thought that quality instruction was provided by substitute teachers. Willerman and McGuire (1986) report a positive performance by substitute teachers based on the measure used. However,

their research design transfers to substitute teachers through intensive and situational training the source of authority and knowledge of rituals which Clifton and Rambaran (1987) describe as being absent in substitute teaching.

The work of Clifton and Rambaran (1987) permits key attributes of alternatives to the use of substitute teachers to be identified. These are source of authority and knowledge of rituals. It does seem that alternatives that have the greatest ownership and support of teachers in a building have the greatest likelihood of being recognized by students as having a source of authority. Also, alternatives that involve full time assignment of staff to a school to cover teacher absences may have a chance of success because of substitute teacher knowledge of students and rituals in the building and classrooms.

Teacher and Administrator Perceptions of Substitute Teachers

With the exception of the opinions of special education teachers (Case, 1986), little information exists on teacher and administrator opinions about the instructional effectiveness of substitute teachers. I determined that if teachers and administrators believed that substitute teachers were instructionally effective, there would be

little likelihood of introducing alternatives to the use of substitute teachers regardless of research to the contrary. To gather information on this issue, I conducted a study in the spring of the 1990-1991 school year using a stratified random sampling procedure. I sent a survey to 865 teachers and 74 building administrators in an urban school district in a rural state. The rate of return was 74%.

The survey consisted of 14 items. Twelve clustered around three topical areas: substitute teacher orientation, classroom management, and instructional effectiveness. Items pertaining to substitute teacher orientation addressed orientation to the building, assistance in understanding routines and procedures in the building, and expectation of elaboration on lesson plans. Items pertaining to classroom management addressed such matters as helpfulness of students, ability to maintain discipline, response of students to substitute teachers, quality of lesson plans, and interruption of instructional progress when substitutes are present. Items pertaining to instructional effectiveness addressed the use of lesson plans provided, effectiveness in introducing new content, effectiveness in drill and practice, and appropriateness of substitute teacher preparation. Two additional items were used. One item asked respondents to indicate the degree to which availability of sufficient numbers of skilled teachers was a

problem and the other inquired about the need to investigate other approaches to classroom coverage.

A Cronbach's alpha was used to determine internal consistency reliability estimates of the three topical areas in the survey: substitute teacher orientation, classroom management, and instructional effectiveness. Based on the magnitude of the inter-item total correlations, the items contained in the classroom management and instructional effectiveness areas were judged to be sufficiently interrelated to be further analyzed as correlated constructs. Substitute teacher orientation was eliminated because the reliability coefficient yielded did not reflect the presence of a construct.

An analysis of variance was used to compare the responses of teachers and administrators. No differences were observed by position or level on the construct of classroom management. The mean scores of administrators and teachers indicated that neither group perceived substitute teachers to be effective in classroom management. On the construct of instructional effectiveness, no statistical differences were found by position. However, statistical significance was found by level of instruction. While no group perceived substitute teachers as instructionally effective, the mean scores by level showed the most positive

responses at the elementary level and the least positive responses at the high school level.

Teachers and administrators were asked about the availability of skilled substitute teachers and the need for the school district to examine alternative approaches to the use of substitute teachers. No statistical differences were found between teachers and administrators by position or level of instruction. Both agreed that there was a problem in the availability of skilled substitute teachers. Also, both groups agreed that there was a need to examine alternative approaches to the use of substitute teachers.

My findings (Caster, 1991) differ from those of McCarther and Clark (1991). In a survey of inner-city teachers and administrators (N = 150 and 30), they report that both groups believe substitute teachers do an effective job of replacing regular classroom teachers. The groups also believe that substitutes can maintain good discipline.

Two reasons may exist for the differing results in the two studies (Caster, 1991; McCarther & Clark, 1991). One may be the methodology used. Significant differences exist between the two studies in design. McCarther and Clark (1991) use a yes-no format and ask respondents: "Do you believe that substitute teachers do an effective job of replacing classroom teachers?" In my study (Caster, 1991),

I presented statements and required responses on a five-point Likert-type scale. Multiple statements related to substitute teacher performance were used to create constructs of instructional effectiveness and classroom management. Unsolicited written comments were provided by teachers and administrators showing empathy for the problems that substitute teachers encounter. McCarther and Clark (1991) had a high percentage of former substitute teachers in their study, 87% of the teachers and 53% of the administrators had formerly served as substitute teachers. Possible identification with substitute teachers, especially with a yes-no format, may have influenced results. I did not collect information on previous experience as a substitute teacher.

The second possible explanation for the differences between my results (Caster, 1991) and those of McCarther and Clark (1991) may relate to the population from which the samples were drawn. Both studies were done in single school districts. McCarther and Clark (1991) describe their district as inner-city urban; mine (1991) was in an urban district in a midwestern state. In fact, there may be differences between the beliefs of teachers and administrators in the two districts about effectiveness of instruction and classroom management of substitute teachers. Simmons (1991) indicates that few schools have devoted the

energies or resources necessary for substitute teacher programs to be effective. McCarther and Clark (1991) may have conducted their study in a school district that has made this investment.

The results of my study (Caster, 1991) support the need for an investigation of alternatives to the use of substitute teachers in the school district being studied. The responses of the teachers and administrators in that district indicate that they do not believe that substitute teachers are effective in either classroom management or instructional effectiveness. Further, they believe that the lack of an adequate supply of skilled substitute teachers is a problem, and they support looking at alternatives to the current system. The data confirm the results of Olson (1971); that is, secondary teachers and administrators perceive the problems to be greater than do either elementary teachers and administrators or middle school teachers and administrators.

Alternatives to the Use of Substitute Teachers

Very little attention has been given to planned alternatives to the use of substitute teachers. Soares (1988) described a program that is one alternative to substitute teachers. He reported on the successful use of graduate students in education as full-time substitute

teachers as part of their graduate training. Since interns were assigned full time to a school, they had a better source of authority and knowledge of rituals (Clifton & Rambaran, 1987) than traditional substitute teachers. Even though the interns received higher ratings than did regular substitute teachers, Soares (1988) did not advocate this as a replacement of substitute teachers. His interest as a teacher educator was in describing a useful field experience for graduate students. Also, in practice, I perceive the opportunity to use such a strategy as being dependent on proximity to a large graduate training institution with an adequate supply of graduate students.

Deutchman (1983) proposed a novel idea. She contended that it is unrealistic to expect a substitute teacher to instructionally replace an absent teacher. Her solution is that the classroom teacher, in conjunction with students, create a list of guests that could be invited to take over the class when the teacher is absent. There is no evidence that this approach has been tried in any school district.

Most information on alternatives to the use of substitute teachers comes from what school districts do when substitute teachers are unavailable to replace absent teachers. Meara (1983) reports use of teacher associates, internal re-assignment of staff, and re-assignment of

students as methods used when substitute teachers are not available.

As part of my study (Caster, 1991) regarding teacher and administrator opinions about substitute teachers, I asked principals if they had experienced the problem of lack of substitute teachers and how they coped with the problem. Only 1 of 62 administrators responding indicated that substitute teachers had always been available when needed. Administrators were asked to respond to a forced choice set of alternatives, indicating those that they had used. Responding administrators indicated whether or not the method had been used and did not indicate frequency of use. The category of "other" was provided, but administrators were not asked to describe those methods because the purpose was to determine perceptions of substitute teacher effectiveness. Almost 18% of the administrators indicated that an "other" method had been used. Identification of those methods might be helpful in identifying useful and workable alternatives to the use of a centralized substitute teacher system. The information provided by the administrators is shown in Table 1.

The need to supervise students while they are in school has caused administrators to develop strategies to use when there are not enough substitute teachers (Caster, 1991; Meara, 1983). It seems realistic that some of those

strategies could be used on a planned basis when teacher absences occur and not just considered as last resort methods when substitute teachers are unavailable.

Table 1

Methods of Classroom Coverage When Substitute Teachers Are Unavailable and Percentage of Administrators Indicating Use

Method	%
Classes covered by administrators	62.9
Classes covered by teachers during planning time	59.7
Classes covered by special program teachers (Chapter I, DM Plan, special education resource)	51.6
Students assigned to other classes	35.5
Classes covered by teacher associates	33.9
Classes covered by counselor, nurse or other support personnel	33.9
Other	17.7

Costs Associated With Substitute Teachers

There is a cost in the use of substitute teachers. While considerable variation exists in the compensation of on-call substitute teachers (Koelling, 1983), Hill (1982) estimated that the annual national cost of teacher absenteeism was nearly two billion dollars. The substitute

teacher costs in the Chicago schools over the period from the fall of 1980 through the fall of 1982 were found to be 8.4% of the annual amount budgeted for teacher compensation (Meara, 1983).

Variation exists in the rates of teacher absenteeism reported in the literature. Kraft (1980) reported that teachers are absent an average of seven days per year. The Educational Research Service (1981) found the average number of paid absence for teachers was eight days per year. Meara (1983) reported the absence rate for the Chicago schools as 10.4 days per year. In their summary of teacher absenteeism, Foldesy and Foster (1989) describe factors that relate to absenteeism, for example, teacher morale, economic level of the school, and geographic setting.

There are difficulties associated with comparing information on absenteeism within and across organizations. Goodman and Atkin (1984) report that comparisons are unreliable because of lack of consistency of record keeping and classification of the type of absences. Regardless, the economic significance of the cost of absenteeism in public education is validated by the variety of efforts to encourage better teacher attendance (Pellicer, 1984; Reed, 1981; Skidmore, 1984).

In my study (Caster, 1991), a cost estimate was done to determine the approximate expenditure for substitute

teachers each year. The daily rate paid to substitute teachers during the 1990-1991 school year was $65. Teachers responding to the survey were asked to indicate the number of days they had missed during the year. The self-reported information on absences included absences for all reasons. Consequently, no inference can be made about the rate of teacher illness because the information includes absences due to emergency, personal business, bereavement, and attendance of conferences or district sponsored workshops. The information is shown in Table 2.

Table 2

Teacher Reported Absences For All Reasons

Number of Days Absent	Teachers Reporting	% of Teachers
0	10	1.6
1-2	117	18.3
3-4	157	24.6
5-6	155	24.3
7-8	93	14.6
9 or more	106	16.6

A minimum estimated cost for substitute teachers can be calculated from the absence information provided by teachers. Table 3 shows the minimum estimated substitute

teacher cost for the 638 teachers for the 1990-1991 school year. The survey sample included approximately 30% of the 2,200 teachers in the school district. An estimate of the cost of substitute teachers for all teachers for the 1990-1991 school year is $640,000. This estimate appears realistic because the average number of days absent for the 638 teachers reporting would have been 4.65 days per school year. Previous studies of absenteeism of teachers in this school district reported a level of teacher absenteeism for sick leave alone that approximates that figure without adding paid emergency, bereavement, or personal business days (Tompkins, 1988).

Table 3

Estimated Substitute Teacher Cost of Survey Sample Using Lowest Estimate of Absences at Daily Rate of $65

Number of Days	Number of Teachers	Minimum Days	Substitute Cost
0	10	0	0
1-2	117	117	7,605
3-4	157	471	30,615
5-6	155	775	50,375
7-8	93	651	42,315
9 or more	106	964	62,010
total	638	2,968	192,920

The amount of money is significant. It takes on greater importance when considered in conjunction with the research and opinion that indicate that the use of on-call substitute teachers is not instructionally effective. It is possible to ask: With the same amount of money, could the schools obtain more benefit? If alternatives to centralized substitute teacher systems exist, school-based management (Herman, 1992; Lindelow & Heynderickx, 1989) provides a logical method for determining the most effective use of the funds previously spent on services from a centralized substitute teacher system.

Summary

The purpose of this study is to determine if alternatives to a centralized substitute teacher system exist, and, if so, whether or not they are acceptable to educators and feasible in practice. The literature related to this purpose includes the organization of substitute teacher systems in large school districts, research on instructional effectiveness of substitute teachers, opinions of teachers and administrators about the instructional effectiveness of substitute teachers, alternatives to the use of substitute teachers, and the costs associated with substitute teachers.

The quantity of literature on alternatives to centralized substitute teacher systems is small. Studies do indicate that substitute teachers are not instructionally effective and opinions of educators are consistent with those conclusions. A few planned alternatives to the use of substitute teachers have been suggested, but most alternatives come out of necessity when substitute teachers are unavailable. The next chapter describes the methodology used to generate planned alternatives to a centralized substitute teacher system and to determine if those alternatives are practical for use in high schools in large school districts.

Chapter 3

METHODOLOGY

The purpose of this exploratory study is to establish a foundation that schools can use in considering alternatives to the use of a centralized substitute teacher system. Even though research indicates that substitute teachers are not instructionally effective (Caster, 1991; Clifton & Rambaran, 1987; Olson, 1971), little information exists about planned alternatives to the traditional substitute teacher system. Methodology in this study is used to generate alternatives to centralized systems at the high school level and examine the attractiveness of those alternatives to students, teachers and administrators. If schools are to consider new ways to cover for absent teachers, the processes that can be used in system change are important.

Even if alternatives are attractive to educators, they must also be feasible. They must provide the classroom coverage needed and do so within the fiscal limits of the current system. The method used to determine whether or not alternatives are feasible is applied to the study of two high schools. An effort is made to describe the school district and the high schools in sufficient detail and to collect data using processes that can be applied to other school districts and high schools. The methodology used

involves an analysis of the need for substitutes and the cost of those services.

Four questions guide this investigation. The methodology used for each question is described in this chapter. Discussion of methodology is preceded by a description of the setting in which this study is conducted.

Setting

This study is conducted in an urban setting in a rural state. The school district has a student population of approximately 30,000 students who are served by 5 high schools, 10 middle schools, and 39 elementary schools. The educational structure used is a K-5, 6-8, and 9-12 plan. The school district also operates two special schools for children with disabilities, an alternative school for middle school students, and two alternative schools for high school students.

A district school is operated at the middle and high school level to provide courses for talented and gifted students and specialized programs in vocational and technical education. Students attend that school for one-half day and have an assignment to a regular middle or high school.

The school district has been aggressively moving toward school-based management. Each school has a school-based

council made up of teachers, parents, community members, and the building administrator. Students are part of the school-based council at the secondary level. Data bases have been created for each school that permit disaggregation of achievement and school climate data. Each year more control over funds and decision-making has been returned to individual schools.

Staff in all buildings have been involved in a variety of shared decision-making activities. Through the district plan for using state monies allocated for improvement of instruction, teachers have participated in determining how funds will be used for special positions, staff development, and special projects in their schools. These experiences in shared decision-making create a potential readiness necessary for teachers and administrators to evaluate alternatives to the centralized substitute teacher system.

The current system for classroom coverage when teachers are absent is the use of a centralized pool of substitute teachers. The district substitute teacher office is contacted when a teacher is to be absent and a substitute teacher is assigned. The substitute teacher remains in the assigned school in that position until the regular teacher returns. Specific substitute teachers may be requested, but no assurance exists that the requested substitute will be available or assigned. An attempt is made to provide

substitute teachers certified in the area of instruction where coverage is needed, but this does not always occur. Substitute teachers generally do not know their assignment until the evening prior to the assignment or the morning of the assignment. Supply of substitute teachers is adequate to meet about 90% of demand.

The five high schools range in enrollment from approximately 1,000 to approximately 2,000 students. All high schools operate under the same personnel procedures and recording of absences is uniform within the district. The course of study available to students provides for little variation since the requirements for graduation are established by the board of education and textbook selections are made by a district-wide textbook adoption committee. Students from all schools have equal opportunity for enrollment in the one-half day district program for vocational-technical instruction and specialized courses for talented and gifted students.

Generation of Alternatives to the Centralized Substitute Teacher System

The first research question in this investigation is: What alternatives to the use of a centralized substitute teacher system will a select group of educators identify? Generation of alternatives is critical to this investigation

because the literature provides little information on planned alternatives to the use of substitute teachers or a centralized substitute teacher system.

A focus group was created to generate alternatives to the existing district substitute teacher system. Morgan (1988) describes a focus group as a form of group interviewing with reliance on interaction between group members to create information. While Morgan (1988) indicates that content validation is not required with focus groups, the design of this study includes validation by collecting the opinions of teachers and administrators regarding the acceptability of the alternatives generated.

In this study the focus group was composed of seven educators including one central office administrator, one high school principal, one high school vice-principal, and four teachers. High school students were not included because the purpose was to generate alternatives acceptable to educators. The teachers represented the content areas of science, social science, art, and industrial arts/technology. The vice-principal had recent experience as an English teacher. Participants were selected based on recommendations from the director of the department of human resources and a subject area supervisor of the school district. These sources were used because of their knowledge of teachers in all of the high schools. Recommendations were based on a

request for names of teachers who represented a variety of subject areas, were good thinkers and communicators, professionally active, and respected by their colleagues. Similar criteria were used for the selection of administrators.

All five of the comprehensive high schools within the school district had representation in focus group membership. The central office administrator was the human resources administrator responsible for supervising the district substitute teacher program. I invited focus group members either in person or by telephone to participate. Two teachers invited to participate were unavailable because of existing conflicts, and I selected replacements the next teachers on the list of recommended teachers without duplicating teaching fields. Following a verbal explanation of the purposes of the focus group, a letter was sent to each participate re-explaining the purpose and giving a brief summary of the literature on substitute teachers. Appendix A contains the letter of invitation and the background information given to focus group participants. I served as moderator of the focus group.

The focus group met after the student school day in the conference room of a centrally located middle school in the district. The meeting was scheduled from 3:00 p.m. to 4:30 p.m., but due to late arrivals actually ran from

3:15 p.m. to 4:50 p.m. Note taking and video recording were used to capture the discussion and the alternatives generated by the focus group. Focus group members were informed that alternatives for covering for absent teachers were restricted to absences of five days in duration or less.

All members of the focus group discussed their individual perspectives on substitute teachers. There was no attempt to achieve formal consensus or to rank order the alternatives according to desirability or feasibility. Focus group members appeared comfortable with the premise that successful alternatives must be appropriate for the school, and that each high school staff must decide the best approach for their setting. Also, there was a shared understanding that alternatives would require some system changes such as methods for budgeting for substitute teachers, procedures for returning monies to high schools, and record-keeping systems. The focus group did not need to address these.

Acceptance of Alternatives to a Centralized Substitute Teacher System

The second research question is: What are the opinions of high school students, teachers, and administrators of alternatives to the centralized system? This question

serves the purpose of determining the acceptance of alternatives by the different groups and thus the likelihood that interest exists to implement them in high schools.

The alternatives to the centralized substitute teacher system that the focus group generated were the basis for two surveys. One survey was conducted of teachers and administrators, and one was conducted of high school students. This permitted testing the alternatives to determine which, if any, would be attractive to high school teachers, administrators, and students.

Two of the 10 alternatives identified by the focus group were not included in the surveys. The alternatives excluded from the surveys were (a) the use of "guest teachers" from the community to serve as substitute teachers and (b) the use of high school students to assist in covering classes. I excluded those alternatives because they were approaches that could not be briefly and effectively explained in a survey, and they could not be implemented without creating new and elaborate procedures in the schools. Since they received far less emphasis and elaboration in the focus group process than did the other alternatives, I did not believe the intent of the study was weakened by excluding them.

Survey of High School Teachers and Administrators

I developed a 10-item survey to collect the opinions of high school teachers and administrators about the alternatives. Eight of the items required respondents to react to the alternatives created by the focus group. Respondents were instructed to view each alternative independently of other alternatives. A five-point Likert-type scale was used to permit respondents to indicate if the alternative was *very attractive*, *somewhat attractive*, *undecided*, *somewhat unattractive*, or *very unattractive*. A criterion of a mean score of at least 3.25 on a five-point scale was used for acceptance of an alternative and an a priori alpha of .05 was used for determining statistical significance.

Two open-ended questions permitted respondents to describe other alternatives that should be considered or to offer comments about the existing substitute teacher system and their needs. Demographic information collected from teachers included name of the school and assignment. School name was not collected from administrators.

The initial survey was modified after review by selected middle school teachers, the department of human resources, and the research department of the school district. Modifications increased the ability of respondents to understand the purpose of the survey and each

of the alternatives presented. The survey was administered in May 1992, to high school teachers and administrators in the five comprehensive high schools. The survey also was administered to teachers and administrators in the one-half day program offering advanced classes and vocational-technical training to students in the comprehensive high schools.

The surveys were delivered to each high school; school secretaries distributed them to teachers and administrators. A cover letter from the director of personnel explaining the purpose of the study and a return envelope accompanied each survey. Surveys were returned to the department of human resources using the intra-district mail system. The letter of transmittal and survey for teachers and administrators is in Appendix B.

Survey of High School Students

As the consumers of substitute teacher services, high school students have opinions that are important to consider in system change. The survey used with teachers and administrators was not used with high school students. Instead, a survey for high school students, one more reflective of their consumer relationship with the substitute teacher experience, was designed. Alternatives generated by the focus group were translated into issues relevant to high school students: (a) having substitute

teachers more experienced in the school, (b) having regular teachers as substitute teachers, and (c) being re-assigned to a study hall or library instead of having a substitute teacher. When the regular teacher is absent, these are the issues facing high school students from the focus group alternatives.

In addition to identifying the opinions of high school students about alternatives, the student survey assessed student perception of the instructional effectiveness of substitute teachers. This was something unaddressed in the literature and important for future decision-making on use of alternatives to the centralized substitute teacher system. This dimension, except for unsolicited written teacher comments, was not included in the teacher and administrator survey because the information had been collected in previous research (Caster, 1991).

An eight-item survey was developed for use with high school students; seven of the items used a Likert-type scale. An open-ended item permitted students to describe an effective substitute teacher. Also, students were invited to provide any ideas they had to improve the effectiveness of the substitute teacher program. Demographic information collected included school name and grade level.

This survey, as the one used with teachers and administrators, was modified after review by the department

of human resources and the research department of the school district. Major changes were the translation of alternatives into statements that would have meaning for high school students. The survey was administered in May 1992, to high school students attending the largest and the smallest high schools in the district. Sample size was based on small population sampling theory (King, 1978) and a 90% confidence level was used to determine the number of student responses needed from each school. The largest school had an enrollment of 1968 and the smallest school had an enrollment of 922 students.

The surveys were delivered to each high school and given to the high school principal. The selection of classes for administration of the survey was determined by the principal of each school. The principals were encouraged to select classes that would permit inclusion of students at all grade levels. Student participation was voluntary. The survey, along with the accompanying instructions read aloud by the administering teacher are in Appendix C.

Processes Required for Enactment of Alternatives

Successful adoption of new practices requires sensitivity to the needs of the people within the organization as well as of the organization itself. The

third research question is: What do high school teachers and administrators see as the processes required for enactment and implementation of alternatives to a centralized substitute teacher system? This question attempts to capture the insights of key members of the organization about the change process in their school and the feasibility of using the alternatives.

I developed a semi-structured interview to use with principals, vice-principals, and department chairpersons in the large and small high school in the district during the summer and fall of 1992. The interview consisted of four questions: (a) which alternatives, if any, are preferred, (b) how would those alternatives be implemented in the school, (c) what problems are anticipated in the implementation of the alternatives, and (d) what other information about the alternatives use of substitute teachers do you wish to share. Five administrators and 14 teachers were interviewed. Participation was voluntary and I obtained permission to tape record interviews. The semi-structured interviews were analyzed using a content comparison procedure. Notes taken during interviews and multiple reviews of auto-tapes served as the basis for the analysis.

Feasibility of Using Alternatives in High Schools

The fourth question is: What is the feasibility of using alternatives to a centralized substitute teacher system in a large and small high school? This question focuses on the practical realities of system change. Its purpose is to determine whether or not alternatives are capable of providing the coverage needed by the schools at a cost no greater or less than the current expenditure for substitute teachers. To accomplish this, it was necessary to review the nature and cost of teacher absences, determine the need for substitute teachers, and apply this information to the use of alternatives in the two schools. The methodology used for these operations is explained in the following sections.

Nature and Cost of Teacher Absences

An understanding of the nature and cost of teacher absences is important to this investigation. The degree to which alternatives are feasible cannot be determined in isolation of information about teacher absences and expenditures for substitute teachers. For the purposes of this study, two high schools in the district, the largest and the smallest, were selected for review and comparison.

Procedure

The 1990-1991 payroll records for each high school were used as the basis for analyzing absenteeism. Procedures for marking payroll reports are defined by the school district, and both schools were expected to use the same procedures. To ensure that analysis would reflect actual costs to the district, the director of human resources and I met to review personnel included in the payroll reports for each school. We decided to exclude from the data analysis personnel for whom substitute teachers were not requested when there was an absence. Excluded were school counselors, school-within-a-school counselors, special education resource teachers, Chapter I resource teachers, and resource teachers in a district compensatory program. One school maintained a teacher on the payroll who was assigned to the high school for only record-keeping purposes until his sick leave had been used and he became eligible for disability insurance. He was absent for the entire year and was excluded from the study. The other school included on the payroll a teacher who was assigned to a special project and for whom no substitute teacher was obtained when he was absent. He also was excluded from the study.

The payroll records of the largest high school contained a list of 114 individuals. One hundred teachers met the criterion of needing replacement when absent and

were included to determine fiscal implications of alternatives. The payroll records of the smallest school contained a list of 61 individuals and 49 of them met the requirement of being replaced by substitute teachers when they were absent.

Another criterion used in the study is the requirement that absences be five days or fewer in duration to be included. Payroll records were reviewed and absences that exceeded five days in duration were excluded.

Teachers are under contract for 195 days, but students attend only 180 days of the year. Because substitute teachers are not used on days when students do not attend, the study was limited to student attendance days. This permits the data to reflect actual substitute teacher cost, but the absence information does not reflect total absences.

Absence Categories

Payroll forms are coded by type of absence. Ten categories of absence are used by the school district: illness, emergency leave, personal business leave, funeral leave, leave for death within the immediate family, professional leave, leave for a religious holiday, jury duty, and leave without pay. The district provides two days of emergency leave per year that can be used for any unforeseen event such as an illness of a child, car problems, or a home emergency. One day per year is provided

for conducting personal business with no explanation being required. Its purpose is for such things as the handling of legal affairs, moving, or enrolling children in college. Emergency leave and personal business leave are non-accumulative. Five days per event are available for leave due to a death in the immediate family. Leaves for attending funerals have no restriction in frequency, but there is a one-half day limit for funerals in the metro-area and a one day limit for funerals outside of the general area. No restrictions exist for the days that may be used for religious holidays, military leave, or jury duty.

Absences due to illness and professional leave represent the two most frequently reported reasons for being absent from school. Absences due to illness are limited to 15 days per year. However, sick days may be accumulated and there is no upper limit on the number of days that may be accumulated. Accumulated sick leave benefits are viewed by the school district as a form of insurance against major accident or illness and no provision exits for compensation of unused sick leave.

Professional leave is a broad category including days used for attending professional conferences, district inservice training sessions, visitations of other schools, participation on high school accreditation teams, and any absence approved by the administration of the high school

for professional growth or service. There is no defined limit on the number of days that teachers may be gone for professional leave. Also, there is no requirement that every teacher be granted professional leave during the year.

The school district incurs a cost of $65 per day when teachers are absent from duties, and a substitute teacher is employed. The only situation in which the school district does not pay both substitute teacher salary and salary and benefits for the absent teacher is when a teacher is granted an unpaid leave of absence. Deduction in teacher salary is based on his/her daily rate which always exceeds the daily rate for substitute teachers. This category, in fact, produces an economic savings to the school district.

A very small return of monies occurs when teachers are on jury duty. Since they are paid for that service while earning teacher salary, earnings from jury duty are required to be returned to the school district.

Determination of Absence Costs

For the purposes of determining the cost of substitute teachers for the two high schools, all categories are included. Even though there is a net savings to the district with unpaid employee leave of absence, the cost of a substitute still exists. Consequently, the projected substitute teacher cost per building is equal to the expenditure that would have occurred for all absence

categories. While it is known that the supply of substitute teachers is not sufficient to meet all absences, the intent of the substitute teacher system has been to fill all requests for substitute teachers. Consequently, the projected cost of substitute teachers is based on the need for substitute teachers. There was no attempt to factor for unmet need for substitute teachers during the 1990-1991 school year.

Need for Substitute Teachers

Teacher absences were coded for each of the 180 student contact days. For each day, the number of substitute teachers was established for the large and small high school. Comparisons are made by quarter, semester, and school year to determine if differences existed.

Feasibility of Alternatives

The alternatives generated by the focus group were individually applied to each school. Two factors were considered in determining feasibility: (a) the amount of teacher coverage possible with the alternative and (b) cost of the alternative. A criterion of 90% coverage of teacher absences is used as a measure of success. This rate of coverage is that which is reported by the department of human resources for the current centralized substitute teacher system. Because there was no interest in a more

expensive substitute teacher system, the cost of alternatives was required to be less or no more than the expenditure calculated for teacher absences for each school.

Summary

The purpose of this study is to establish a foundation that schools can use in considering alternatives to the use of a centralized substitute teacher system. Multiple issues exist that are not addressed in the literature, issues necessary for decision-making. A combination of quantitative and qualitative methodology is used to generate data.

Clear alternatives to a centralized system have not been identified and a focus group is used to generate possible alternatives. A survey of high school teachers and administrators is used to determine the acceptance of those alternatives. The consumer's perspective is obtained through a survey of high school students. Interviewing of administrators and department chairpersons is conducted to obtain insight into the alternatives most acceptable for implementation and the processes that would be used.

Two schools, a large and small high school, are studied to determine the need for substitute teachers and the cost of teacher absenteeism. This information is used as a basis for examining the degree to which alternatives provide

needed coverage for absent teachers within existing economic limits.

Chapter 4

ANALYSIS OF THE DATA

The purposes of this study are to generate alternatives to the use of a centralized substitute teacher system and to examine the acceptance and feasibility of those alternatives in urban high schools. This chapter describes the results from the data gathering process of this investigation. Data were collected in four main areas: (a) alternatives to a centralized substitute teacher system, (b) acceptance of alternatives by students, teachers and administrators, (c) processes required for enactment of alternatives, and (d) feasibility of using alternatives in high schools.

Alternatives to a Centralized Substitute Teacher System

The literature (Caster, 1991; Meara, 1983) identifies the responses which schools have used when district-wide substitute teacher systems are unable to supply the number of substitute teachers needed. However, the literature does not provide information on alternatives to a district-wide substitute teacher program. Central to this investigation is generating alternatives for possible use at the high school level. Alternatives were defined as methods of covering for absent teachers that would not rely on the

district-wide substitute teacher system. That is, a high school would not have to request a substitute teacher from the district substitute teacher pool to cover for an absent teacher to meet the needs of the school. This section describes alternatives to a centralized substitute teacher system generated by the teachers and administrators making up the focus group.

Alternatives Generated by the Focus Group

The focus group identified 10 alternatives to the use of the district-wide substitute teacher system. The alternatives can be grouped into three categories: (a) full time assignment of staff, (b) internal coverage within the high school, and (c) other methods. Full-time assignment of staff included having specific substitute teachers or additional contract teachers assigned to the high school, as well as the use of teacher associates to supervise students. Internal coverage for absent teachers included having teachers assigned to substitute as part of their regular schedule, teachers substituting voluntarily and with extra compensation during planning periods, non-teaching but certificated support personnel (principals, vice-principals, counselors, and others) substituting, departments having the option to combine classes without the use of a substitute and, lastly, assigning students to a study hall or the library when the regular teacher is absent. The "other"

category includes (a) using student leadership when regular teachers were absent and (b) using members of the community to cover classes when teachers were absent. Each alternative is described along with rationale given by the focus group members.

Assignment of Full-time Staff to Substitute

1. Specific substitute teachers assigned to each high school

The focus group discussed the importance of substitute teachers knowing the students and building procedures in a high school. Many of the limitations of the centralized system were attributed to the transient nature of substitute teachers. It was suggested that each of the high schools have specific substitute teachers assigned to it. The group believed that this exclusivity of assignment would permit greater recognition of the substitute teacher by students and staff, thereby creating a more positive instructional setting. The substitute teachers would continue to be paid at the substitute teacher rate. It was also mentioned that the "specific substitute teachers" could be reassigned to other schools if they were not needed.

2. Full time contract teachers assigned as substitutes

The employment of additional full time contract teachers and their assignment to high schools to serve as substitutes was suggested. The rationale for having them in

a school was consistent with the rationale for specific substitute teachers assigned to high schools. These full-time teachers assigned to substitute duty would receive contract salary and benefits. The possible fiscal limitation of this alternative was mentioned as a potential obstacle. Support for this alternative came from teachers in the focus group who were concerned about teachers having permanency within a school without all the accompanying contractual benefits afforded other full time teachers.

3. Full-time teacher associates assigned to supervise students

Since much of substitute teaching consists of student supervision, a duty that can be performed by teacher associates, the use of teacher associates was suggested. One focus group member reported this as a method of classroom coverage currently being used in her high school when the supply of district substitute teachers is inadequate to meet the needs of the high school. Focus group members were uncertain about the legality of this method and also the availability of teacher associates that could competently perform this function. Even though there was agreement that substitute teaching, especially where teachers are not skilled in the subject area, is essentially student supervision, there was a belief of some members that

it should done by a certificated teacher. Full time teacher associates are contract personnel and receive benefits.

Internal Coverage Within the High School

1. Substitute teaching as part of the teaching assignment

The high schools in the district have moved to a seven-period school day, which has increased the teaching assignment of each teacher by one class period. It was suggested that high school teachers have one of the periods of the seven-period day scheduled for serving as a substitute teacher. Under this plan, some teachers would have five periods for instruction, one period for planning, and one period for substitute teaching. While this was suggested by teachers, no teacher in the focus group indicated an interest in doing this. A definite preference for teaching their own class as opposed to substituting was expressed by some teachers in the group.

2. Options given to departments on the request of substitutes

High schools are organized into instructional departments. Also, some high schools are experimenting with cross-content teams. It was suggested that departments or teams be given the opportunity to request that no substitute teacher be obtained if a department or team member was going to be absent. The department or the team would have the

responsibility to arrange coverage for classes, but some of the cost saved from not having a substitute teacher would be returned to the department or team.

3. Support staff to substitute teach

It was suggested that the certificated support staff in buildings be required to substitute teach a minimum number of days during the year. This requirement would exist for the principal, vice-principals, counselors, work-experience coordinator, consultants, and other similar staff assigned to high schools. The number of days per school year suggested for substitute teaching was three. No specific rationale was given for the number of days recommended.

Administrators being required to substitute is not a totally new idea. Grier and Creech (1990) indicate that a South Carolina district requires all central office administrators, principals, and assistant principals to substitute one day each semester.

4. Identification of classes where substitutes are not to be used

The difficulty encountered by a substitute teacher in adequately providing instruction in some classes because of the nature of the content was discussed. It was mentioned that classes of a laboratory nature, such as chemistry, art, and industrial technology, usually make it impossible for a substitute teacher to conduct lessons planned by the

teacher. The teachers in the focus group agreed that considerations of student safety and preservation of equipment made it imperative that the planned lesson not be conducted by someone unfamiliar with the students, the laboratory setting, or the curriculum. Likewise, it was suggested that there are content areas where substitute teachers are generally not available, such as higher level mathematics or foreign language classes. Replacing the absent teacher with someone untrained in the content area was viewed as without instructional benefit.

It was suggested that where those conditions are present, students should be assigned to study halls or given the opportunity to go to the library instead of having a substitute teacher. Formally abandoning any effort to continue instruction by assigning students to study hall or the library was not a comfortable decision. Some reluctance existed about not requesting substitute teachers. It was unclear whether this hesitancy to cancel class was because of commitment to substitute teachers, perceived implementation problems, possible negative public relations, or some other reason.

5. Option given to teachers to substitute during planning time with compensation

Under the current comprehensive agreement, teachers can be assigned during the period designated for planning and

preparation to cover classes for absent teachers. This is done infrequently and only in emergency situations because of the value placed on teacher planning. It was suggested that teachers be given the opportunity to volunteer to substitute teach during their planning period, but be compensated for the additional service provided to the high school. All focus group members appeared to be comfortable with this alternative, but one teacher did explicitly state she had too much preparation to ever want to do this.

After many years with a six-period day, high schools expanded the number of instructional periods to seven. This resulted in most teachers having one additional class to teach than in previous years. This was a change unpopular with teachers and made any involuntary loss of teacher planning time a sensitive subject. Teachers in the focus group felt they maintained control with this option with the stipulations of it being voluntary and with compensation.

Other Methods

1. Guest teachers from the community

All high schools are attempting to expand their relationships with business partners and other community members. It was suggested that selected individuals such as artists or business leaders be invited to serve as "guest teachers" when a planned absence for a teacher was going to occur. Focus group members acknowledged that a great deal

of pre-planning and matching of "guest teachers" to classes would need to occur for this alternative to be successful. The issue of compensation of guest teachers was not discussed.

2. Use of high school students to assist

The current use of students in one high school as "class helpers," a program where they assist teachers, was discussed. These are students who have an interest in assisting and demonstrate leadership skills. It was suggested that students, either "class helpers" or other class members, could be identified and prepared to assist when the regular teacher was absent. This alternative received limited discussion and, while the utility of greater use of students seemed to be accepted philosophically, there was no belief that this would replace the need to have a responsible adult in charge of the class.

Observations About the Focus Group

The focus group identified 10 alternatives to the existing centralized system for assignment of substitute teachers. Prior to discussing alternatives, the group needed to affirm the worth of individuals who substitute and agree on the difficulty of their job. There was general agreement that the current system would benefit from modification, and interest existed in having the opportunity to use funds differently.

One member of the group, based on her own experience, supported the current system. She felt able to obtain effective substitute teachers because within the pool are individuals who did their student teaching with her. Because of their experience with her, she believes that they understand the processes used in her classroom and, as a result, instructional effectiveness is maintained when she is absent. She acknowledged that teachers outside of social science might not find this to be true.

Acceptance of Alternatives

The alternatives to the centralized substitute teacher system generated by the focus group served as the basis for two surveys. One survey was conducted of teachers and administrators, and one was conducted of high school students. The results of each survey are presented separately and then are discussed.

Results of the Teacher and Administrator Survey

Surveys were distributed to 443 teachers and 19 administrators; 281 teachers and 16 administrators returned them. This represented a 63% return rate for teachers and a 84% return rate for administrators. Twenty-seven teachers did not identify their school and 34 did not identify their assignment when completing the survey. Because the survey

was distributed at the end of the school year, no follow-up was conducted.

General Results

Four alternatives were identified by teachers and five identified by administrators as being attractive. Three alternatives were jointly identified by the two groups and these were (a) specific substitute teachers assigned to each high school, (b) full time contract teachers assigned to high schools as substitute teachers, and (c) the option given to high school teachers to substitute teach during their planning time for extra pay.

Teachers, but not administrators, identified having support staff (administrators, counselors, work-experience coordinators, and consultants) substitute teach three days during the school year as attractive. Administrators, but not teachers, identified giving departments the option to not request substitute teachers and the use of teacher associates to supervise classes as attractive alternatives to the existing system. The group means and standard deviations for each item are shown in Table 4.

Table 4

Teacher and Administrator Response to Alternatives to a Centralized Substitute Teacher System by Item (N = 281 and N = 16)

Item	Teacher Mean	Teacher SD	Administrator Mean	Administrator SD
1. substituting as part of teaching assignment	2.0	1.4	2.9	1.4
2. departments allowed to not request substitutes	2.5	1.4	3.8*	1.2
3. specific substitutes assigned to high schools	4.1*	1.0	4.2*	1.2
4. support staff to substitute	3.5*	1.5	2.8	1.6
5. contract teachers assigned as substitutes	3.8*	1.3	3.4*	1.4
6. teacher associates to supervise classes	2.9	1.4	3.5*	1.3
7. no substitutes for selected classes, reassign students	2.9	1.4	2.5	1.4
8. planning time used for substituting, optional and with compensation	3.3*	1.4	3.8*	1.1

* mean of 3.25 on scale of 1-5 as criterion for acceptance of an alternative

Results by High School

A one-factor ANOVA was used to analyze teacher item responses by school. Statistically significant differences were observed on two items: (a) giving departments the

option to not request substitute teachers and (b) identifying classes where substitute teachers would not be used and students reassigned to a study hall or the library. Two of the six schools reached the criterion of a mean score of 3.25 for giving departments options on the request of substitutes and two different schools reached the criterion for identifying classes where substitute teachers would not be used and students assigned to study hall or library. An ANOVA for those two items is shown in Tables 5 and 6.

Table 5

ANOVA of Teacher Response by School on Item 2: Departments Allowed to Not Request Substitutes

Source of Variation	Sum of Squares	Degree of Freedom	Mean Square	F
Between	50.07	6	8.34	3.835*
Within	628.83	289	2.18	
Total	678.90	295		

* $p < .05$

Table 6

ANOVA of Teacher Response by School on Item 7: No Substitutes for Selected Classes, Reassign Students

Source of Variation	Sum of Squares	Degree of Freedom	Mean Square	F
Between	27.61	6	4.60	2.283*
Within	560.44	278	2.02	
Total	588.05	284		

* $p < .05$

Results by Category of Teaching Assignment

I asked teachers to designate their assignment when completing the survey. Categories of assignment were created and where the number of teachers in a category was 25 or more, their responses were compared. Teacher assignments numbering 25 or more included language arts (English, speech, drama, and journalism), mathematics, special education (all areas), science, and social science. Table 7 contains the item means to survey items for each major category of teaching assignment.

Table 7

Item Means for Major Teaching Assignments

Item	Language Arts (N = 40) mean	SD	Mathematics (N = 29) mean	SD	Special Education (N = 33) mean	SD	Social Science (N = 25) mean	SD	Science (N = 28) mean	SD
1. substituting as part of teaching assignment	1.5	1.0	2.5	1.6	1.9	1.3	2.4	1.5	2.1	1.4
2. departments to allowed not to request substitutes	2.2	1.4	2.4	1.5	2.5	1.6	2.3	1.5	2.8	1.4
3. specific substitutes assigned to high schools	4.6*	.55	4.0*	1.0	4.0*	1.2	4.1*	.9	4.5*	0.5
4. support staff to substitute	3.6*	1.5	3.6*	1.6	3.5*	1.6	3.1	1.4	3.6*	1.6
5. contract teachers assigned as substitutes	3.6*	1.5	3.5*	1.4	3.9*	1.2	4.1*	1.0	4.1*	1.1
6. teacher associates to supervise classes	3.3*	1.4	2.9	1.4	2.6	1.5	3.4*	1.1	2.4	1.4
7. no students for selected classes, reassign students	3.5*	1.3	2.8	1.3	2.6	1.4	2.5	1.7	3.3*	1.3
8. planning time used for substituting, optional, and with compensation	3.3*	1.4	3.0	1.4	3.1	1.6	3.3*	1.4	3.3*	1.5

* mean of 3.25 on scale of 1-5 as criterion for acceptance of an alternative

I compared categories of assignment using a one-factor ANOVA and found differences on three items. These items pertained to (a) the assignment of specific substitute teachers to each high school, (b) the use of full time teacher associates to supervise classes when teachers were absent, and (c) the identification of classes where substitute teachers would not be requested when the regular teacher was absent. All teacher groups believed that assignment of specific substitute teachers to each high school was attractive (item 3). The means on this item for the five teacher groups ranged from a low of 4.0 to a high of 4.57 on a scale of 5.0.

The greatest differences by teacher assignment were in the use of teacher associates to supervise and in having selected classes where substitute teachers would not be requested (items 6 and 7). Language arts and science teachers were more favorable toward using teacher associates as a method of covering for absent teachers than were other teacher groups. Also, language arts teachers and social science teachers looked favorably, in contrast to the other teacher groups, at selecting classes where students would be reassigned to a study hall or the library when the regular teacher was absent. An ANOVA for items 3, 6, and 7 are presented in Tables 8, 9, and 10. Effect size to determine practical significance was computed for the high and low

means for each of the three items. Practical significance exceeded .5 for each item.

Table 8

ANOVA of Teacher Response by Teaching Assignment on Item 3: Specific Substitute Teachers Assigned to Schools

Source of Variation	Sum of Squares	Degree of Freedom	Mean Square	F
Between	9.77	4	2.44	3.04*
Within	120.38	150	0.80	
Total	130.15	154		

*p < .05

Table 9

ANOVA of Teacher Response by Teaching Assignment on Item 6: Use of Teacher Associates to Supervise Students

Source of Variation	Sum of Squares	Degree of Freedom	Mean Square	F
Between	21.06	4	5.26	2.72*
Within	288.00	149	1.93	
Total	309.06	153		

*p < .05

Table 10

ANOVA of Teacher Response by Teaching Assignment on Item 7: No Substitutes for Selected Classes, Reassign Students

Source of Variation	Sum of Squares	Degree of Freedom	Mean Square	F
Between	21.9	4	5.47	2.83*
Within	280.93	145	1.94	
Total	302.83	149		

*p < .05

Written Comments

Eighty-six of the 281 teachers completing the survey, almost one-third, provided written comment. Comments ranged in length from short phrases to almost a full page of information. A variety of feelings were expressed, some where high agreement existed, some where opinions were mixed, and some that were specific to a given teacher's situation. I grouped teacher comments into six categories: (a) teacher absences/compensation for sick leave, (b) regular teachers serving as substitute teachers, (c) observations about substitute teachers, (d) opinions about changing the substitute teacher system, (e) observations about the current substitute teacher system, and (f) other comments.

The category of "teacher absences/compensation for sick leave" was the largest category of teacher comment. It was also the category of greatest consensus. Teachers tended to express the opinion that a system of pay for not using sick days or a buy-back of unused sick days at retirement would reduce absenteeism and the need for substitute teachers. Stated and implied in the comments was the belief that some teachers unnecessarily use their sick leave. One comment summarizes the opinion of many of the teachers: "I think some teachers need incentives to not be gone so much." The need for recognition for good attendance was expressed by other teachers. One teacher said: "It would be nice to be noticed for regular attendance as a staff member. We do this kind of stuff every year for kids."

A variety of suggestions was offered, most having to do with a buy-back program for unused days of sick leave. Suggestions for purchasing unused sick leave days ranged from one-half of the daily rate of substitute teachers to $5 or $10 per unused sick leave day. No comments about maximum days or general procedures for a buy-back program were offered.

A few different ideas were offered related to incentives to reduce teacher absenteeism. One teacher suggested providing teachers with a second personal day if no sick leave days had been used during the previous year.

Another teacher suggested a $25 or $50 bonus for teachers who did not require a substitute teacher during the year. However, this teacher didn't want to discourage conference attendance by teachers. Another teacher proposed limiting the accumulation of sick leave to 20 or 30 days with a buy-back provision for unused days. This is in great contrast to the current system which has no ceiling on accumulation of sick leave.

The idea of regular teachers serving as substitute teachers was of interest to teachers. The majority of written comments were neutral or negative about regular teachers substituting. The most positive comments supported teachers being compensated when they covered for one another. Some teachers believed this practice would affect instructional quality: "The better teachers would need the time for planning. Less efficient teachers perhaps would be motivated for the wrong reasons." Another teacher identified a different issue related to teachers covering for each other: "The pressure to come to work when I don't feel good is great enough without knowing the pressure is being placed on other building teachers to cover my class." This was mirrored by the teacher who believed that teachers "should not have to worry about their classes being covered by someone who doesn't want to be there."

No teacher described substitute teachers as being instructionally effective. Some comments captured the difficulty associated with being a substitute teacher at the high school level. Teachers wrote, "It seems that no matter who stands in front of a temporary class the individual receives very little respect as a person," and, "No person, no matter how talented, dedicated, or well-educated, could hope to step in and carry on a meaningful daily instruction." The most critical statement was that substitute teachers should be instructed "not to read books, knit and baby-sit. And, should be instructed to follow plans left by teachers and not sit at the desk." Some teachers in unique positions, such as business education or driver education, indicated that they knew the district would be unable to supply a qualified substitute teacher for them.

Opinions about changing the current substitute teacher system were rather evenly divided. Little elaboration existed when teachers supported maintaining the current system. Phrases like "continue present system" were typical. Some statements supporting system change were rather direct: "I applaud your efforts in looking for alternatives. Substitutes have generally been ineffective, especially on a short-term basis." The support for system change was evidenced most frequently in support for

substitute teachers being assigned to a single school. Some teachers described the perceived benefits of substitute teachers better knowing the students and the school as a result of a single building assignment.

The issue of support staff serving as substitute teachers received only a little comment. The opinions varied. With either a touch of humor or sarcasm, one teacher urged increasing the amount of substituting service of principals, vice-principals, counselors, and others from three days per year to two weeks. Another teacher supported this because she believed that substituting would be a good way for administrators and others to get to know the students. Some written comments indicated that support staff had their own duties that needed to be performed, and substituting would disrupt those functions.

Some teacher comments related to the substitute teacher system. The selection, assignment, supervision, evaluation, and rewarding of substitute teachers were mentioned as areas where improvement was needed. A few teachers believed that greater input should be requested from them on the specific substitute teacher to be obtained and on the evaluation of that substitute. Most comments focused on the need for better training and supervision and the elimination of substitutes who did not perform well. One teacher suggested greater compensation for those substitute teachers who

perform well. These comments were interpreted as belief that the current system would be more acceptable if the suggested corrections were made.

The category of "other comments" contained primarily teacher statements about their own subject areas and individual situations. Teachers of art, business education, drivers education, nursing, deaf education, and other special education programs provided comments. Four very specific suggestions came from this category:

1. "Each teacher knows someone who can best teach his or her class. Must these substitutes be state certified? Schools are missing a vast pool of good experiences in non-certified people."

2. "Allocate money to individual buildings based on 'average' teacher absences. Return unused money to the building; buildings with excessive absences should be responsible for making up the difference."

3. "Create and staff a subject area study center. On days a staff person is gone, the study center person could substitute."

4. "I am a half-time teacher teaching periods 5, 6, and 7 each day. I would be willing to substitute periods 3 or 4 for additional pay."

One school administrator provided a written comment. "The professional activities which cause teachers to be

absent are very worthwhile and important; however, we must find another way to complete these tasks without the interruption of our learning activities." It is assumed that the timing of the survey, the end of May, discouraged administrators from making written comments. Or, this one principal had been monitoring absences closely and was concerned about the impact of professional leave on teacher absences. This opinion was validated as a problem by teacher comments.

Discussion

Whether or not alternatives to the centralized substitute teacher system are acceptable as judged by teachers and administrators is important to this investigation. Alternatives acceptable to the two groups were identified by the survey. Support existed for increasing the permanency of substitute teachers through either having specific substitute teachers assigned to the high school or having contract teachers in the school perform that function. The two groups also supported giving the option to high school teachers to substitute teach during their planning time for extra pay.

Equally important is that differences also exist in the acceptance of alternatives. Teachers, but not administrators, endorsed having certificated support staff serve as substitute teachers during the year. I saw in

teacher comments an interest in having administrators and other support staff appreciate the difficulty of their job. Administrators, but not teachers, supported the use of teacher associates to supervise students in lieu of getting substitutes. I attribute the openness of administrators to using teacher associates to their greater experience with para-professionals. Few high school teachers have worked with teacher associates. Also, teachers frequently questioned the legal status of teacher associates in supervising students without a teacher being present. Administrators, but not teachers, also supported giving departments the option of not requesting substitutes for absent teachers. While I was not surprised at administrators' comfort in empowering teachers to make decisions, I cannot explain why teachers rejected this option.

In addition to differences in the opinions of teachers and administrators, other factors influenced acceptance of alternatives. Variation was seen between schools in the acceptance of alternatives and between teachers of different subjects. These differences are important. They point to the need for the selection of alternatives to be done within each high school for maximum teacher acceptance. This is in contrast to the centralized system, a top-down and uniform method of covering for absent teachers. School districts

will need to tolerate differences between high schools for all schools to experience success.

The written comments of teachers provide additional support for investigating alternatives to the current substitute teacher system. Some teachers directly encouraged seeking alternatives and spoke of the instructional ineffectiveness of the current system. Teachers said: "Let's try something new," and "The options seem reasonable and innovative." Others were content with the current system and said: "What's wrong with our current system?" or "Keep it the way it is!!" However, no comments suggested that substitute teachers under the current system offer an instructional contribution to high school students.

Results of Student Survey

The survey was administered in the largest and smallest high school. There were 222 responses from the large high school and 274 from the small high school and one undesignated response. Sample size based on small population sampling theory (King, 1978) was projected at a confidence level of 90% and actual returns exceeded a confidence level of 95%. Table 11 shows the number of students responding by grade level from the two high schools.

Table 11

Student Survey Returns by School and Grade

School	Grade Level 9	10	11	12	Unknown	Total
Small high school	142	57	47	26	2	274
Large high school	114	48	36	24	0	222
Unknown	1	0	0	0	0	1
Total	257	105	83	50	2	497

Student Perception of Substitute Teacher Effectiveness

In addition to identifying the opinions of high school students about alternatives, the student survey assessed student opinion about the instructional effectiveness of substitute teachers. This dimension is not reflected in the literature. Three items were used to obtain the opinions of students about the meaningfulness of instruction, classroom order, and student learning with substitute teachers. In general, high school students indicated that instruction provided by substitute teachers was limited in meaning (Figure 1) and 47% of the students rated learning with a substitute teacher as less than acceptable (Figure 2). Almost half of all the students rated substitutes as less than effective in maintaining classroom order (Figure 3).

Figure 1. Ratings of high school students of meaningfulness of classes taught by substitute teachers (N = 497).

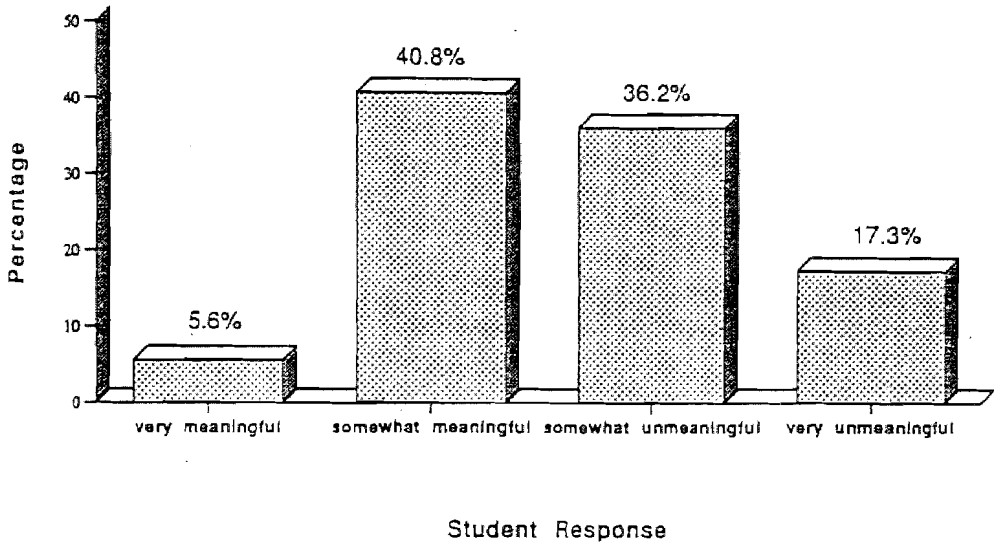


Figure 2. Ratings of high school students of learning when taught by substitute teachers (N = 492).

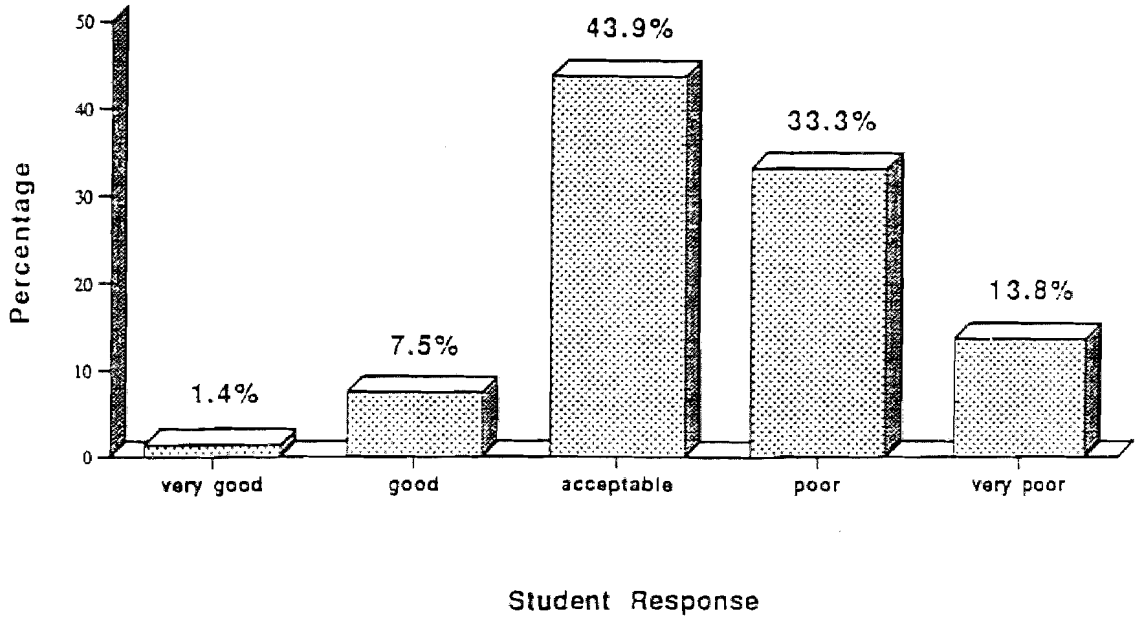
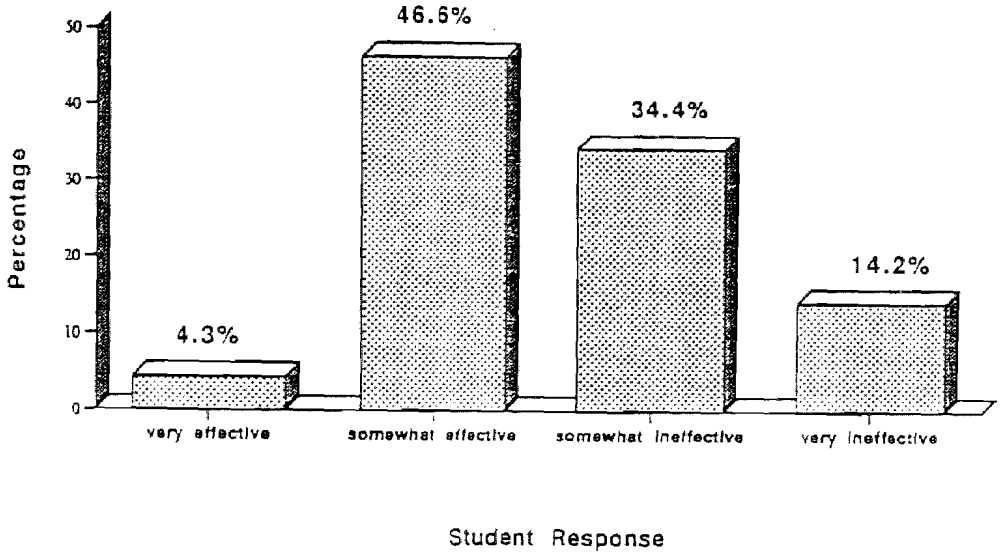


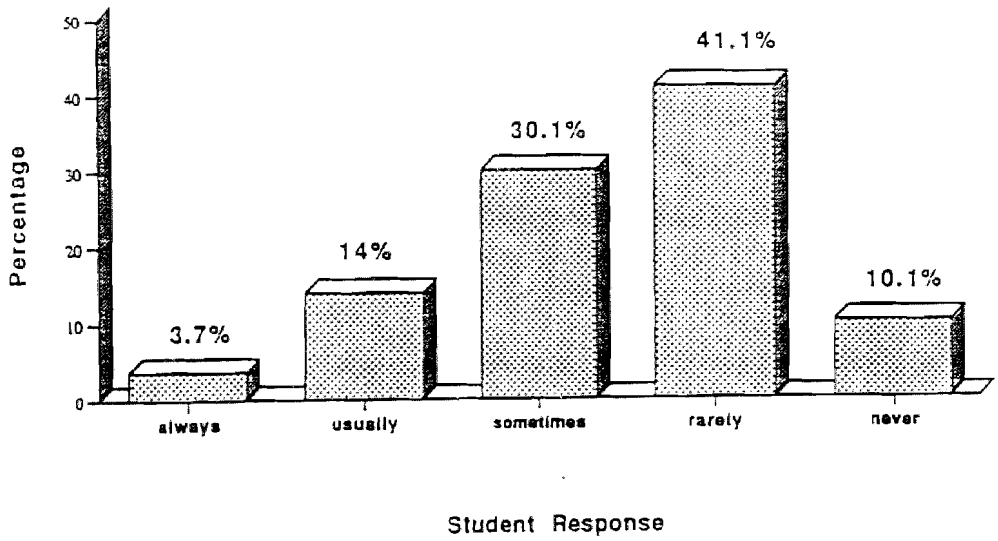
Figure 3. Ratings of high school students of classroom order of substitute teachers (N = 494).



I asked students to recall and describe a substitute teacher who was effective in replacing an absent teacher, and then rank the frequency that substitutes perform in that manner. Most students did this. However, there were some students who described a negative situation, one where the substitute, in my judgment, was ineffective. When students reversed the description from positive to negative, they ranked the frequency of occurrence according to a negative standard. This meant that some negative situations were ranked as *always* or *usually*, two desirable responses for the item. I decided not to attempt adjusting the frequency rankings for this item because some student responses were difficult to interpret and I did not what to impose my

biases on student responses. The result of this design problem is that student opinion about substitute performance is even more negative than shown in Figure 4. It shows that 51% of students believe that substitutes rarely or never perform as students perceive effective substitutes performing.

Figure 4. Ratings of high school students of frequency that substitute teacher performance match perception of effective substitute teachers (N = 436).



Student Perception of Alternatives

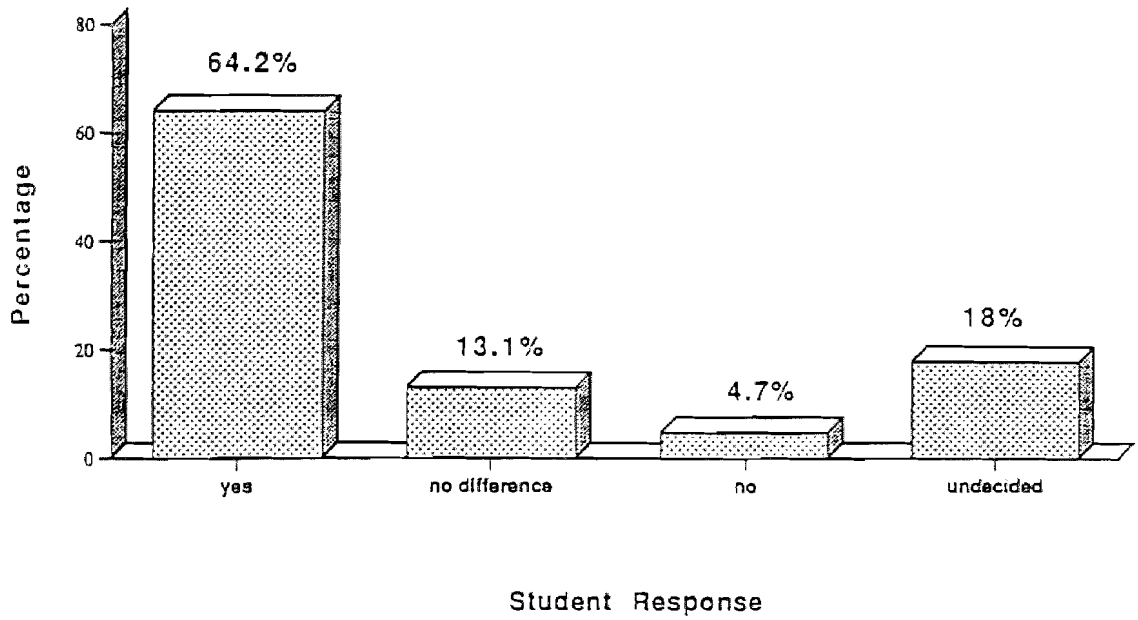
I determined that the alternatives generated by the focus group could affect students in three ways: having substitute teachers more familiar to students and with the school, having regular teachers serve as substitutes, and

being reassigned to a study hall or the library when the teacher was absent.

1. Substitute teachers with greater experience in the school

Almost 65% of the students agreed that increasing the experience of substitute teachers in their school would enhance quality of instruction (Figure 5). Five percent of the students disagreed and 13% did not believe it would make any difference in the quality of instruction.

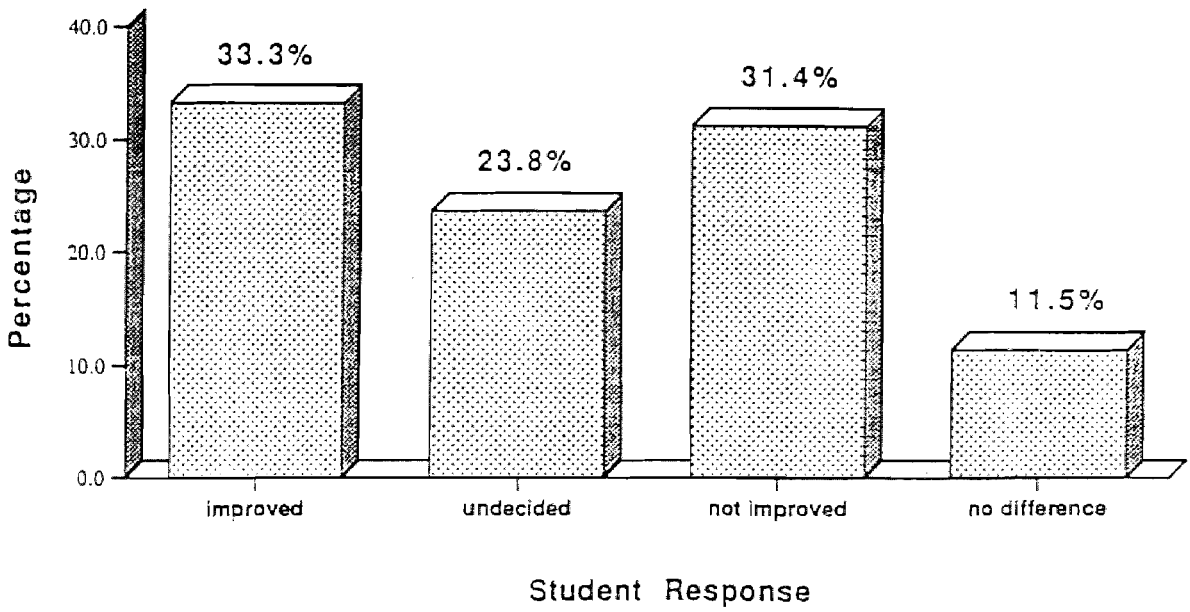
Figure 5. Ratings of high school students of improvement of substitute teacher performance as a result of greater experience in the high school (N = 495).



2. Regular high school teachers serving as substitute teachers

High school students were uncertain that by having regular teachers from their school serve as substitute teachers that instruction would be better (Figure 6). While one-third of students thought instruction would be better from another teacher in the building, almost that number disagreed and more than 10% of the students indicated that no difference would exist. Twenty-three percent of the students were undecided on this question.

Figure 6. Ratings of high school students of improvement of instruction if other teachers in the high school served as substitutes (N = 496).



3. Reassignment to a study hall or the library when the teacher is absent

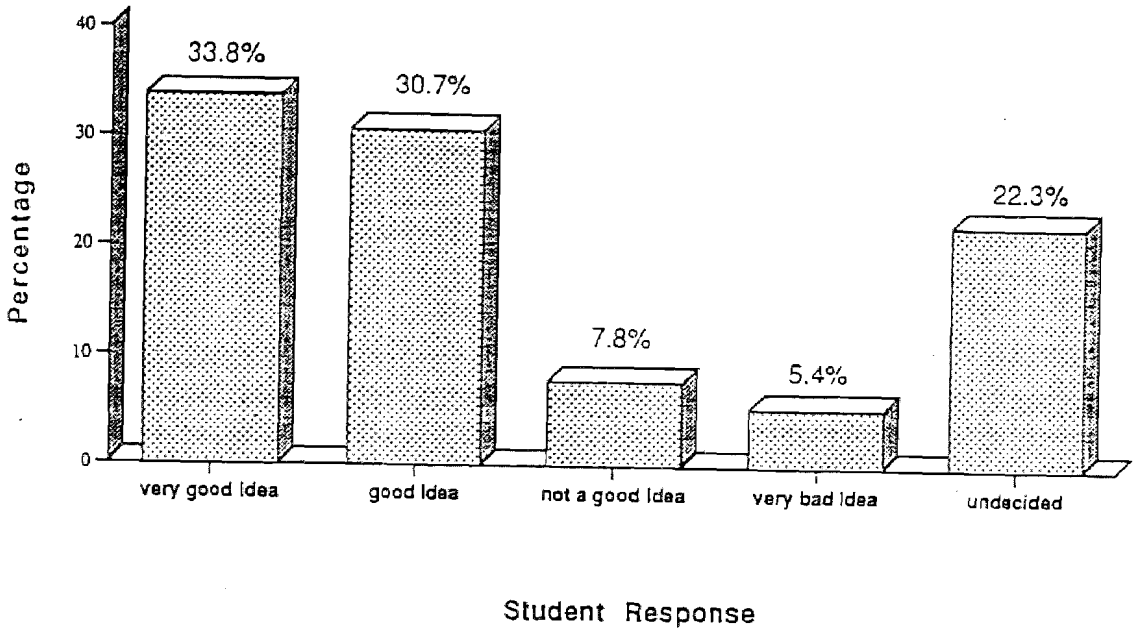
Not having a substitute teacher, but having a study hall or going to the library when the regular teacher was absent was viewed positively by almost 65% of the students (Figure 7). However, 22% of students were undecided and 13% did not agree that study halls or assignment to the library would be better than having a substitute teacher.

Written Comments of Students

I asked students to recall and describe a substitute teacher who was effective in replacing an absent teacher. Students were also given the opportunity to share any ideas about the substitute teacher program or how students see the role of substitute teachers. The written comments of students demonstrated a rather well defined belief system about substitute teachers and student likes and dislikes. Student comments were sometimes brief, sometimes highly articulate, often humorous, and occasionally off-color. One response was pictorial. It showed two acts of aggression occurring: in one, a person was being choked and in the other, a person was being shot while the aggressor was saying "die scum." Great consistency existed in the thoughts of students regardless of grade level or school.

The effective substitute teacher was described by students as having two main competencies: classroom control

Figure 7. Ratings of high school students of desirability of reassignment to study hall or library instead of having a substitute teacher (N = 485).



and content knowledge. These were followed closely by respect for students and sense of humor. These competencies are included in the descriptions of effective teachers in the literature (Brophy & Good, 1986; McGreal, 1983). Student comments often reflected concern for how they were treated when the regular teacher was absent. Discomfort with changed routines and classroom processes are reflected in some student statements. Clifton and Rambaran (1987) argue that those are two reasons that substitute teachers lack authority in the classroom.

A sample of the comments from high school students is provided in the following material. I have organized student comments within three topics: effective substitute teachers, subject matter concerns, and classroom management concerns. Naturally, there is some overlap because students shared thoughts and feelings; they were not bound to any categories. For each statement, the student's grade level and the frequency that the student believes the description is reflected in practice is provided.

The topic of effective substitutes gives some insight into what high school students believe are important characteristics for substitutes to possess. The climate and the atmosphere of the classroom seem to be important to high school students. Also important to them is the maintenance of classroom rules and procedures, described by Clifton and Rambaran (1987) as rituals.

"The teacher is cool and knows what he/she is doing. Usually, the class will do what they're supposed to. Like if a teacher doesn't change the rules and goes by what the original teacher does, then usually the class will cooperate" (grade 9, sometimes).

"The teacher made learning fun and interesting. They found ways to involve the students and that way they became interested and wanted to learn. Not only did the teacher get us involved they also got involved. Not only with the

work but acted as if they wanted to get to know me as a person and not just a student. They made me feel comfortable and showed me they cared. That it just wasn't a job but they really cared about getting through to us" (grade 9, rarely).

"The class was very loud at times. The substitutes usually know the subject but have a different teaching style so they really confuse you more than they help and they are not up to date on how our school is ran" (grade 11, usually).

"She tried to explain the things the teacher had left for her to do. She didn't just give us the work and say 'Here! Do it!' and then go to her desk. She was also younger and spoke to us as if we were people not aliens from outer space" (grade 10, never).

"Interesting, fun worksheet, doing things that are fun but still learn something. Takes charge of class. Let's class get comfortable with him or her" (grade 9, rarely).

"He just came back like a normal teacher. He was really organized and knew how to do the work" (grade 10, rarely).

"There hasn't been many. Also, it was a student teacher whom was helping our regular teacher and one day our regular teacher was gone. She took her place for the day and it was like usual because she knew us and also what to

do and what to say because she was familiar with the building and class" (grade 9, rarely).

Students seem very outcome oriented, and they seem to communicate interest in continuing the class and the content when the teacher is gone. Expectations exist for the content expertise of substitute teachers.

"The class was a general class, but the sub knew what she was teaching. That way if we had any questions, she could answer them" (grade 12, rarely).

"She knew what she was talking about. She was an English major teaching an English class, not a math major trying to" (grade 12, sometimes).

"It sucked, sub did not know anything about math. He was a music teacher" (grade 9, rarely).

"It was for a Spanish class and the teacher actually knew Spanish. She was very nice and the class was extremely attentive to her. She taught the class in a relaxed manner so it was more like the regular teacher" (grade 12, rarely).

"I am unable to think of a specific event, but I feel the substitute teacher is most effective when they are teaching in a subject or field they have a degree in" (grade 12, rarely).

Classroom management was mentioned frequently by students. They seemed to appreciate the need for control and discipline, but at the same time were somewhat

resentful. Students also acknowledged that when the regular teacher is gone that student conduct changes.

"He or she knew something about the class. He or she kept us quiet. He or she ran the class smoothly" (grade 9, sometimes).

"Well the class does get away with a little more when a sub is there because most subs don't really know the ropes of the classroom" (grade 10, sometimes).

"The teacher told us right away what we could and couldn't do and the class behaved accordingly" (grade 9, rarely).

"She wasn't wishy-washy or nervous. She let us know straight off that anyone who messed around would be kicked out" (grade 12, rarely).

"They explained the assignment that we were going to do that day. They helped us through it, if we didn't understand. The class was a little noisier than usual but well behaved" (grade 11, usually).

"He/she knew what he was teaching. The class wasn't loud" (grade 9, sometimes).

"They had experience in the field they taught and issued discipline. They seemed to enjoy the class if kept under control. They did not inflict harsh consequences during the class. They made time fly, because it was fun" (grade 9, rarely).

Discussion

Students, like the teachers and administrators, believed that quality of substitute teaching would be enhanced by having substitute teachers more experienced in their school. Some written comments of students even mirrored those of teachers about the benefits to substitute performance of better knowledge of students and staff, and familiarity with school rules. Also, like teachers and administrators in previous research (Caster, 1991), students believed that substitute teachers were instructionally ineffective.

Two alternatives of the focus group involved regular teachers serving as substitutes as part of their assignment or during planning periods. One-third of the students believed that having their regular teachers in the school serve as substitutes would improve instruction when the regular teacher was absent. However, almost an equal number of students did not believe that it would improve instruction. Eleven percent of the students did not believe there would be any difference in instruction offered by their regular teachers and substitutes. Interviews provided insight into these beliefs. When substitute teachers are unavailable, regular teachers sometimes cover classes in shifts during their planning time. That is, two or three teachers will supervise the class, each taking 15 minutes or

so. When this is done, students receive supervision, but no instruction is provided.

Regardless of the reasons, students did not believe instruction offered by substitute teachers had much value. In general, they were very conservative in identifying any approach as being an improvement. No proposed change was seen as having a major positive impact on instructional quality.

A major difference in the opinions of students, teachers, and administrators was in the appropriateness of not having substitute teachers, but reassigning students to study halls or the library. As a group, teachers and administrators did not support this method. Almost two-thirds of the students supported this as an alternative to having a substitute teacher. It was interesting to observe that about 20% of the students were undecided, and some students did not like this approach at all. Varied opinion among students would seem to counter any notion that students would automatically elect a study hall or library period as opposed to having class.

The students have strong feelings about substitute teachers. They were less interested in having a wasted class period than one might have predicted. If anything, students seem indignant that they are provided substitutes to teach them who were unprepared in the subject matter.

Students generally described the effective substitute teacher as a power figure coming into the classroom, taking charge and setting limits. As I read and re-read their comments, it seemed that even though students acknowledged the need for control, there was often a feeling of being demeaned and intimidated. One only has to picture a substitute teacher attempting to bring a high school class to order to imagine voice tone, body language, and threats of punishment. According to students, desirable substitutes do not "inflict harsh consequences" but do make "me comfortable and showed me they cared," and "spoke to us as if we were people and not aliens." The history of students with substitute teachers unprepared in the assigned content area and their experience with negative classroom climates may account for their preference for not having substitutes when the regular teacher is absent. The perception of high school students about substitute teachers warrants consideration of change to the current substitute teacher system.

Process Required for Enactment of Alternatives

The current substitute teacher system is rooted in tradition. One participant in the study described it as being "essentially unchanged over the past twenty-five years." Changing an established practice in a large school

system is often difficult. In this investigation, I interviewed key members of the two high schools, administrators and teachers, to capture their insights about the proposed alternatives and how change might occur in their schools. In this section an analysis of those interviews will be provided.

Interviews of Administrators

I interviewed the principal of each school, two vice-principals in the large high school, and one vice principal in the small high school during the summer of 1992. Both principals were male and two of three of the vice-principals were female. The interviews were conducted in each administrator's office and took from 40 to 55 minutes to complete. All administrators expressed interest in the study and indicated that they hoped that some change could be made in the current substitute teacher system.

Every administrator commented on the instructional ineffectiveness of substitute teachers. One said that, "substitutes on a one or two day basis are little more than a baby sitting situation." Another administrator related the issue of substitute teachers to the school's mission of student learning. He commented, "We are going against the mission of the school because so many times substitutes are not prepared, and it is a total loss of the kid's time.

Sometimes it affects them in a negative fashion, and they go backward."

Reaction To Proposed Alternatives

The preferred alternative of all administrators is the use of substitute teachers specifically assigned to their high school. They believe that there would be great value in having substitutes who know their school, the staff, and the students. Some of their observations about having permanent substitute teachers are:

"I like the idea of them being assigned to a particular facility. It makes them more accountable. I think it gives them kind of an anchor; it might make substitute teaching more meaningful to them."

According to one administrator, a possible advantage of substitutes being assigned specifically to a school is that they will "learn the processes of the teachers, get to know the students, get to know other staff members, and learn where to go and what to do. They would get to know the vice-principals and how to refer students with some effectiveness."

The principals spoke rather accurately of the number of substitute teachers that would be needed to be assigned to their schools to cover absences. They were acutely aware of seasonal variations and the role of professional leave in the need for substitutes. The principal of the small high

school shared a database on staff absences that he maintained, and he projected that assigned substitutes would need supplementing to meet days of high absenteeism.

The vice-principals seemed to have more direct responsibility for working with substitute teachers than did the principals, and they had greater interest in the relationship between substitutes and discipline issues. One vice-principal reported that twice as many students were sent to the office by substitutes than by regular staff members. They were enthusiastic about the possibility of having some consistency in the substitutes in the school. The importance of having substitutes whom students know was explained by a vice-principal:

"They [students] think there is more accountability then. When you know the kids and they know you, they are more apt to comply with the expectations. If there is a stranger, they are more apt to have an attitude that they don't know me, I don't know them, and I don't want to do anything and I'm not accountable."

The attractiveness of having substitutes assigned to a high school was enhanced by the additional time that the substitutes would be at the school. While the current system does not give substitutes a shorter day than regular teachers, in practice it usually occurs. Substitutes often do not get their assignment until it is too late in the

morning for them to be at school when teachers are supposed to report. Also, since most absences are of a one day duration, substitutes usually do not return the following day. This makes it impractical for administrators to invest time in training them for after school duties. As a result, administrators say substitutes "can't wait to get out. They're bailing out with the kids." A permanent assignment would make it more feasible to require substitutes to maintain teacher hours and to assign before and after school duties to them. It is not impossible to do this with the current system, but a combination of tradition and practicality cause it not to be done.

Different benefits were projected by having the substitute teachers work the same hours as other teachers. Vice-principals saw a role for substitute teachers, those assigned to a school and who know the students, in assisting with supervision of halls before and after school. A principal perceived the possibility of enhancing instruction with assigned substitutes. Often regular teachers who will be absent the following day because of illness are identified before the school day is over. Professional leave is always known in advance. As the principal sees it, this creates the opportunity for the teacher who will be gone to "sit down with that substitute teacher ahead of time, give them the lesson plan" and prepare them for the

class. This orienting of substitutes by the teacher who will be absent is not possible with the centralized substitute teacher system.

Administrators liked the idea of consistency of substitute teachers, but they saw no value in having teachers on contract assigned to substitute teach. They were conscious of contract teachers costing considerably more than a substitute teacher. Administrators agreed that paying contract salary for substitute teachers is "not a good use of money."

Administrators looked favorably at the other alternatives, but their emphasis was on the use of substitutes assigned only to their building. The possible benefits of this alternative were very clear to principals and vice-principals. In some respects, the attractiveness of having permanent personnel in the school lessened their interest in other alternatives. Yet, they did express the belief that other alternatives could be used.

Initially, the use of teacher associates to supervise students in classes where qualified substitute teachers were unavailable was rejected. The first response of administrators tended to be: "I don't know if its legal," or, "I don't know what the legal implications are. Is there a legal problem if they are not certificated?"

The Iowa State Department of Education (1988, p. 36) indicates that teacher associates are employees who:

> in the presence or absence of professional instructional staff members but under the direction, supervision, and control of the instructional professional staff, supervises students on a monitoring or service basis; and works with students in a supportive role under conditions determined by the instructional staff responsible for the students, but not as a substitute for or a replacement of functions and duties of a teacher as established in subrule 12.4(8).

Since a teacher (Iowa Department of Education, 1988) "diagnoses, prescribes, evaluates, and directs student learnings in terms of the school's objectives," the use of teacher associates to supervise students is not in conflict with state standards. It is an option available when continuance of instruction is not expected to occur.

When the legal authority of teacher associates to supervise was explained, the principal in the large high school saw a possible use for teacher associates. In his high school, 40% of the teachers spend one of their assigned periods supervising either study halls or the student center. He conjectured that if teacher associates were used for the supervision, teachers could be reassigned to cover for members of their department. This variation was applicable only to larger departments, but he visualized a possible way of maintaining instruction where it currently is not possible. Because this approach would provide an extra planning period except when substituting was

necessary, the principal believed it would be attractive to the teachers now assigned to study halls or the student center.

The smaller school could not use this approach. Most teachers are assigned to teach six periods, and the numbers of study halls are fewer. To create the same opportunity in the smaller high school would require increasing class sizes which was something the principal did not want to do.

Administrators were not opposed to serving as substitute teachers. They reported doing this at times when substitute teachers were unavailable, but just for class periods and not the entire day. They did not see full day substituting as a practical strategy because of the unpredictable nature of their duties. Reference was made to situations where administrative actions could not be postponed such as discipline problems, unexpected parent visits, and the occasional problems of actual or attempted student suicide. Administrators assumed that internal coverage would create a return of monies to departments and that their substituting could be used to assist smaller departments to generate extra funds. They recognized that departments with few teachers would have less opportunity to take advantage of alternatives that returned money to them.

Internal coverage by departments was viewed positively by administrators, but they did not expect this to be a

widely used strategy. The reasons for this included lack of opportunity of some departments because of size, the coordination required, and the interest of teachers. They felt the teachers valued their planning periods too much to want to use this strategy on a frequent basis. This alternative was reported as being used though. One school has a social studies class that uses team teaching. By choice of the teachers, when one team member is absent, no substitute is requested. Also, when substitutes are in short supply, physical education does not receive a substitute because of the opportunity of the department to combine classes.

Administrators expressed the belief that qualified substitute teachers were not available for some subjects. Some named calculus, geometry, trigonometry, chemistry, foreign language, and instrumental and vocal music as classes where substitutes qualified in the subject matter were not usually available. Others described classes where substitutes are unavailable more generically, such as, "upper level or advanced placement classes." Even with no expectation that instruction would continue without the regular teacher, no great interest was expressed in having students assigned to a study hall or library as an alternative to using a substitute. Because teachers do not teach only upper level classes, the principals inquired,

"What would be the advantage?" They did not want to send all of a teacher's classes to a study hall when only a few of them were upper level classes. Also, the smaller high school had fewer study halls, and they served small numbers of students. The ability of those study halls to physically absorb whole classrooms of students prevented this from being a viable option in that setting.

Using teachers to cover classes during their planning period is a current practice. All administrators saw it as an alternative for days of high absenteeism and shortage of substitutes. From their perspective, using teacher planning periods is a last resort and efforts are made to rotate the responsibility. Administrators were protective of teacher planning periods. They were also aware that coordination with six teachers would be necessary to replace one teacher.

Compensating teachers when they are required to use their planning period to cover for another teacher was acceptable to all but one principal. He described this practice as a current service being performed for the school. He believed redefining it as a compensated service would offer nothing additional to the school or the school district. He also indicated that compensation would be harmful because it would alter the climate of teachers supporting one another and the school. Compensation of teachers who substitute during planning periods is an

important issue and is discussed further in the next chapter.

Implementation of Alternatives

There was great consistency in how administrators, regardless of school or position, described the process of implementing alternatives. The opinions and attitudes of teachers were believed to be important in determining any changes that would be made in basic school practices. A decision to implement alternatives was not seen as a unilateral action that should be taken by the school principal.

Each high school uses a form of school-based management and administrators stressed the importance of staff participation in the change process. Department chairpersons meet regularly with the principals and serve as the conduit for information flow from teachers to the principal and from the principal to the teachers. All responses indicated that the opinions of the department chairpersons would be important in making decisions. However, decisions would not be made until departments had ample opportunity to discuss proposed changes, and the opinions of teachers reported. Introducing the topic as an item for discussion at a faculty meeting was also mentioned as a way to begin the change process. Follow-up would occur within departments.

Each high school also has a school-based council (SBC) with a role in the change process, especially for major school issues. The SBCs meet monthly and include teachers, students, parents, and community members. Its role in each school is advisory in nature, but the councils appear to identify issues that should be studied and legitimize direction proposed by the staffs of the schools. Administrators expected that approval would be sought from the SBCs on any recommendation to change the substitute teacher system made by the principal's cabinet.

The interrelationship between the staff, chairpersons, and SBC is seen in a principal's description of the process that he would follow to bring about change.

> I'd work with my department chairpersons; they're my core group to bounce ideas off. We've got a pretty active SBC too that likes to deal with some of those issues. They would be the first two groups. My normal sequence of presenting things is to go to the SBC, then to the department chairs and from there to the faculty.

The principals were concerned about involvement of all groups prior to a decision being made. The principal's cabinet and involvement of staff appeared to take on greater importance in the change process as the alternatives had a more direct impact on the teachers. Administrators perceive the use of specific substitutes assigned to their high school as less of a change than other proposed alternatives. Alternatives using internal coverage, especially re-assigning students, were issues that the administrators,

especially the principals, wanted discussed within departments before any decisions would be made.

Problems Anticipated in the Implementation of Alternatives

Administrators did not express any major concerns about the implementation of alternatives. Given latitude to select alternatives, they believed that system change could occur. The principals projected confidence in their ability to work with the department chairpersons in designing and managing acceptable change.

Possible economic returns to the school from self-management of the substitute teacher system seemed to administrators to be a motivation to which teachers would respond. A principal reported that teachers already say, "Since we're the substitutes today and the district is saving $65, why couldn't we have that $65?"

The preferred alternative for administrators was the use of specific substitute teachers assigned to the school. A major problem was identified, and it was in the selection of the substitute teachers. One principal commented on the substitutes that might be permanently assigned to him. He said some substitutes now are "just a warm body. . . . You assign me three of those folks who can't get to the second floor and you haven't done me any favors. Then, you're talking about the whole evaluation process to get rid of

them." Principals wanted to be involved in the selection of any substitutes assigned to their schools on a permanent basis.

Other problems using the alternatives were suggested. Alternatives using internal coverage were viewed as creating administrative problems. Assigning some, but not all, of an absent teacher's classes to a study hall creates new communication problems. The students who are reassigned need to know where to go, and the study hall teacher must know to expect them. Also, if teachers cover during their planning time for an absent teacher, six teachers must be contacted to cover for one absent teacher. Who has the responsibility of determining the assignments and who notifies the teachers? Administrators were not overly concerned with such problems. They were aware that modifications in the substitute teacher system would require adjustments in the organization, record keeping, and communication within the high school.

Interviews of Department Chairpersons

Fourteen teachers, seven from each high school, participated in interviews similar to those conducted with administrators. The teachers were department chairpersons and represented the subject areas of language arts, mathematics, social science, science, physical education, foreign language, and music. Interviews were arranged

through the principals of the two high schools. Experience as a chairperson ranged from 2 to 22 years, experience in the buildings ranged from 3 years to 23 years. The purposes, just as with the administrators, were to identify which, if any, alternatives were preferred, how those alternatives would be implemented in the school, and the problems anticipated in the implementation of the alternatives.

Chairpersons were cooperative and willing to share their ideas. Interviews ranged from 25 to 45 minutes in length with most lasting about 35 minutes. The setting in which two interviews were conducted did not lend themselves to tape recording. Insights into preferences and conditions under which alternatives might be successful were obtained. Chairpersons were aware that the interest of the researcher was in understanding and reporting possible differences between department preferences and the feasibility of using alternatives. I report information on specific departments where circumstances or ideas were unique from other departments.

Observations of Chairpersons

I reviewed the content of the interviews of department chairpersons and three themes emerged: experiences with substitute teachers, student reaction to substitute teachers, and reaction to proposed alternatives. These

themes are discussed separately, but information is not presented by department. I did not observe major differences by department in these areas. There are some ways in which the departments appeared unique in their needs and ability to use alternatives. The researcher's perspective on each department is presented.

Experiences with Substitute Teachers

Little confidence exists in the ability of substitute teachers to provide instruction when teachers are absent from the classroom. Some of this is due to the training of those who substitute. Three departments, foreign language, music, and science reported that they could expect someone with preparation in their area only about 20% of the time. Mathematics had an even lower expectation that someone trained would be available. Language arts, social science, and physical education tended be fair better. They had substitutes trained in their fields about 80% of the time. However, social science and language arts chairpersons said there was still a problem in having someone skilled to teach the advanced classes because of the specialization of the content. One teacher observed that even though a substitute is trained in an area, "It means they have the knowledge. It doesn't mean they necessarily go the extra mile with the kids."

To cope with the reality of not having substitutes prepared in their areas, some chairpersons reported developing two sets of plans. They let the substitute teacher know "if you don't feel comfortable with my lesson, there is an alternate assignment in the substitute teacher folder that will work."

The physical education departments in the high schools are in the strongest position to maintain instruction when a department member is absent. A teaming situation is described where teachers work with students on different activities. When a team member is absent, they shift responsibilities to give the substitute something that she/he is able to do. This permits maintaining swimming instruction where special licensing is required. Physical education teachers altered their teaching stations so students in high risk activities could be adequately supervised.

Student Reaction to Substitute Teachers

Two different descriptions of student reactions to substitute teachers emerged during the interviews. The first was that having a substitute teacher was an opportunity to act differently. Students were said to "take advantage of them no matter who it is." Much of the advantage taking centered around incorrectly telling substitutes the procedures of the class, for example,

telling substitutes that the class is dismissed at an earlier time than it should be dismissed.

The other description of student reaction is their feeling of being wronged by substitute teachers. Students expect substitute teachers to know the content of classes they are supposed to be teaching. It was said that students are not sympathetic with a substitute not knowing "as much as the students feel he or she should."

Insight into the affective domain of students is aided by the observations of a chairperson who asked students to write about their experience with a substitute teacher. I met with the chairperson on the first day following a three day absence. The chairperson's interpretation was that the students:

> had a lot of negative feelings about how they were treated only because the person was not [trained in the area] and was not comfortable with what they were doing. I think its part of a defense mechanism. They got short and sharp with the kids. The substitute wouldn't answer the student's questions and got angry if they asked questions. . . . Day 2 and day 3 came and the substitute preferred to say, 'do your work and keep quiet.' The students thought the substitute didn't like the kids.

These observations are similar to those contributed by the students themselves.

Reaction To Proposed Alternatives

The alternative supported by chairpersons is the specific assignment of substitute teachers to each high

school. They favor this alternative for the same reasons that administrators favor it. One chairperson succinctly summarized why this alternative was attractive: "It offers benefit to all of us simply in that the people would know the building and the policies." Chairpersons, especially in areas where substitutes with content training were unavailable, did not see it as a solution to all of their problems unless the substitute was trained in their area. No one believed the use of contract teachers as substitute teachers was economically feasible.

Using teacher associates to replace absent teachers was not something that was initially attractive to most chairpersons. This seemed to change somewhat as they described the lack of opportunity to continue instruction and their strategies to provide content that someone untrained in the subject matter could supervise. As they verbalized that only supervision would occur, the use of teacher associates became more reasonable to them. One teacher said, "In some aspects, associates might do a better job. They would know they are not expected to introduce new content." Also, where student leadership was already being relied on, for example, in music and upper level foreign language classes, using teacher associates to supervise seemed to have some application.

Even though using teacher associates seemed feasible to many chairpersons, I did not sense that any of them would introduce that as an alternative for their school. There were many uncertainties about what teacher associates could legally do in a school. Also, a major concern to chairpersons was the maintenance of instruction and content coverage in their classes. They believed it was already difficult to meet course objectives because of the district moving from a six-period day to a seven-period day. In the author's estimation, adopting a strategy that would eliminate the possibility of instruction and replacing it with only student supervision would be uncomfortable. However, given the opportunity to thoroughly study the issues and to be certain that better alternatives are not available might make this a more desirable option.

Regular teachers substituting as part of their assignment or during their planning period with compensation were two alternatives considered. Some support existed for having teachers substitute as part of their assignment. This alternative was seen as having substitutes who were known to the students and who knew the procedures in the building. It was also seen as a way to reduce the instructional load from teaching six classes back down to five.

Compensation for substituting during planning periods was supported by chairpersons. A typical comment was, "I do feel we should be compensated. Its a pretty general feeling around the building." However, the chairpersons themselves were not interested in substituting. All indicated they had too much to do, and they valued their planning period too highly to give it up for substituting. One chairperson thought it had merit but was concerned that it would be necessary to substitute when called on: "There's a lot of times I would do it, but there's a lot of times I wouldn't." Another thought that other teachers might have an interest in it: "I know there are a lot of people who sit and don't do much during their planning period. I don't happen to be one of them, but there may be others who are interested."

Chairpersons understood the need for administrators to call on teachers to substitute during their planning periods when no substitutes were available. They also said teachers resented losing their planning periods. It was not because of an unwillingness to help, but a concern about being unprepared themselves. A chairperson commented, "If you have planned to do something that hour, like run off a test, then you can't essentially be organized yourself," and "who looks bad and who's not prepared because they gave up their time?"

Some interest existed in covering classes within departments and benefiting in a return of monies. One of the main reasons that this was attractive was that in some cases it is already being done without compensation. The greatest amount of departmental coverage without getting substitutes existed in the music and physical education departments. However, a social studies class in the large high school used team teaching, and substitutes were never requested when a team member was absent.

Covering classes within a department had greater feasibility in the larger high school because of the size of most departments. Where interest existed it was because of the possible return of monies to the department and was linked to absences for professional leave. While there was a clear dislike for covering unexpected absences, planned absences offered the opportunity for the department members to be involved in the decision to cover for a colleague who was going to be attending a meeting. I sensed that intra-departmental coverage for professional leave would be contingent on teacher agreement on how the funds would be used.

Reassignment of students to study halls or the library instead of getting a substitute teacher was of little interest to chairpersons. Two reasons emerged. The first reason was that chairpersons wanted something of

instructional value to occur for students when teachers were absent, and they did not think it would occur if students were reassigned. However, they quickly described this alternative as being impractical because study halls were already too filled to accommodate other classes. It was indicated that teacher associates could supervise study halls "unless it is a meek and mild person." It was never assumed by chairpersons that additional study halls could be created if the faculty found this alternative attractive.

Substituting by the principal, vice-principals, and other support staff received comment from only one chairperson. It was not as much of support for the alternative as an observation: "I think its healthy to get back in the classroom once in a while. It keeps them abreast of what's going on."

Chairpersons are very aware of the problems of maintaining instruction when teachers are absent and seem to have interest in alternatives. Of all the alternatives to the current substitute teacher system, they most supported the assignment of specific substitutes to the high schools. Support to the other alternatives existed, but in varying degrees. In speaking of the alternatives, one chairperson commented: "I see all of these as viable alternatives if you can get agreement of people in your department."

Observations about Departments

Seven different departments were included in the interviews. I found some ways in which they were unique in their needs and ability to use alternatives to the current substitute teacher system. I comment on each department, but I do not discuss the benefits of having specific substitutes assigned to a school. The advantages, especially for planned absences, of teachers being able to meet with the person substituting prior to the absence were indicated by all chairpersons and applies to all departments.

The mathematics departments, more than any other, indicate difficulty in getting substitute teachers that are capable of providing instruction. Teachers do not expect substitutes that can assist the students. Consequently, assignments are prepared when teachers anticipate being absent that students can complete on their own. I believe the low expectations for substitutes is why using teacher associates to supervise classes when teachers are absent received some acceptance. Yet, there may be other alternatives. The math departments are large enough, especially in the large high school, to look at creating a schedule so teachers can cover for one another. Teachers may not prefer to do this for unanticipated absences, but absences for professional leave may be appealing because

planning can occur, and funds can be gained for the department.

The science departments of the two schools, for the first time, have a full-time teacher associate. The use of the teacher associate to supervise students when a teacher is absent is not something that has been considered. Teachers are sensitive to the comfort of their teacher associate in supervising students. Yet, their departments' difficulty in getting substitutes qualified to teach is almost as great as the math department. Having a teacher associate that could supervise classes when a teacher is absent, if the department chooses, creates the opportunity to cover their own classes when a teacher is absent. The intent of adding teacher associates to science departments in the district is to provide needed assistance in preparing experiments, record keeping on hazardous chemicals, and other important tasks. While permission would need to be obtained, I believe that for planned absences the science departments could use their teacher associate to cover classes and capture funds for the science department. I am not suggesting the teacher associate become a replacement for absent teachers. Instead, I suggest the science teachers discuss the opportunity they have and decide the best use of their resources. Social science and language arts departments are two of the larger departments in each

school. They also have the advantage of generally getting substitutes that are trained in their subject areas. By benefit of size, they also have the greatest opportunity to choose to cover for one another when absences are planned. This gives them a greater opportunity than most departments to generate resources for their programs.

Social science and language arts are also the two departments where the use of a teacher associate to supervise students was responded to positively by teachers in the survey. Chairpersons attributed this to the amount of independent reading and project work that students do in the courses.

The language arts department is unique because one course, forensics, takes the teacher-coach away from the building on Fridays during the forensic season. This is a known absence. The classes of the absent teacher are described as only needing supervision because they have received independent work. There may be a variety of ways that the department or school could cover for this absent teacher during the forensics season.

Teachers in the music departments already cover for each other. This has been necessary because music teachers are responsible for taking groups of students into the community to perform. Chairpersons report covering for one another within the department by canceling individual

student lessons and scheduling some classes that are team taught, allowing one person to be gone without a substitute being requested.

The ability to get substitutes who are trained in music to replace an absent teacher and continue instruction is not easy. One chairperson said: "It's difficult to come in and teach someone else's music and rehearse it. I don't know if I would want to do it." Chairpersons reported that often class or rehearsal continues because of good student leadership. An adult is only needed for supervision and avoiding potential liability for negligence. This capability for self-management does not exist for every student group. Where leadership has not emerged or practice is not desired, one chairperson reported that music teachers assign books or video tapes when they are gone. The chairperson reported that "in my field there are a lot of options" in designing activities for students that are appropriate. The specialized and activity based nature of music seems to invite looking at alternatives to cover for absent teachers.

Foreign language is an area with its own challenges in the replacement of absent teachers. Not only is the pool of substitutes small, but even if they are available, they generally do not have the mastery necessary to work with the upper level classes. In contrast to most departments in

which a common specialty prevails, foreign language teachers do not all have the same skills because they do not know the same languages. There is little instructional advantage in having foreign language teachers cover classes where they do not know the language.

Two approaches were described in the interviews. One chairperson, when absent, uses students in upper level classes to help maintain instruction. Lesson plans instruct the substitute to ask a student to help teach the lesson if she/he is not comfortable with the content. The substitute's responsibility becomes that of providing adult supervision. It was believed that a teacher associate could supervise this activity with advanced classes but the associate would have the same difficulty with ninth graders as do substitutes. This approach was not suggested for beginning classes.

The other approach suggested for foreign language was the creation of a media library, video tapes, and computer software, from which assignments would be given when teachers were absent. According to the chairperson, some materials already are available, and they could be expanded through funds provided to the department as a result of assigning students to the media center when foreign language teachers are absent. It was believed that the coordinator

of the media center would be very supportive of increased use of that resource.

Physical education is the subject area where the greatest interdepartmental cooperation occurs. It is necessary because of the organization of the program and the variety of instructional units taught. Physical educators indicated that covering for one another was common. When there are staff absences, they also reassign staff to maintain instruction and insure adequate student supervision. Physical education experiences success in getting trained substitutes about 80% of the time. In the other 20%, they adjust assignments so the substitute can be successful.

The organizational flexibility of physical education is its strength, but also creates problems for the program. When there is a shortage of substitutes, physical educators believe that it is their program that is asked to go without a substitute. With few choices available, it may be logical to choose the physical education departments to go without a substitute teacher, but the chairpersons believe it is disruptive to their programs. It was suggested that funds obtained by the department as a result of not having a substitute could be used to assist with purchasing equipment or designing activities for occasions when no substitutes are provided.

Implementation of Alternatives

All chairpersons supported some change to the current substitute teacher system. Following a discussion of alternatives, each chairperson was asked how she/he might go about initiating a change in the substitute teacher system being used in the school. In most cases, this inquiry required some follow-up questions about how change occurred in their school. I got the impression that chairpersons were not accustomed to introducing school-wide change. Instead, I suspected issues involving change in overall school practices or policies were presented to them for consideration.

There was similarity in how department chairpersons described the process for implementing alternatives. In general, all chairpersons perceived involvement of teachers as being critical before a decision was made that affected their departments and the teachers in the school. As a group, chairpersons had less of a clear vision of an overall change process than did the administrators. When I probed responses, chairpersons tended to describe the same process as did the administrators. However, they seemed to view themselves as an informational link to the principal and not as individuals empowered to speak for their department without consultation with its members. During discussion of alternatives, some chairpersons commented that they favored

an alternative, but they would add, "I wouldn't want to speak for members of the department without asking them."

The most common description of the change process began with a meeting of the department chairpersons and the principal. If interest did exist in the proposed change, the issue would be sent back to departments so all teachers could be part of the discussion. A future meeting of the department chairpersons would review the opinions of departments and a decision made.

A few variations of this process were reported. One chairperson indicated that a suggestion for change would not be offered at a meeting of the department chairpersons as a first step. Instead, she/he would "speak to the principal to see how he wanted to handle the issue." Another believed the process would entail the principal presenting the topic for discussion, followed by a vote, at a faculty meeting. A third chairperson thought that a proposed change in the substitute teacher system would be discussed at a faculty meeting and if there was interest, a study committee would be appointed to make recommendations to the faculty. Ultimately, the faculty would vote on the recommendations.

The prevalent theme of the descriptions was faculty involvement and support before change would be introduced. This leadership group believed one of their main functions was insuring involvement of their constituency. Nothing was

implied about lack of teacher involvement being a past problem, but chairpersons indicated increased faculty participation in decision-making since the district began using school-based management. This was perceived by one chairperson as time consuming and a distraction from the focus on teaching.

There was uncertainly on the part of most chairpersons about whether or not the school-based council would be part of the change process. There was not opposition, just lack of knowledge. Those who perceived, without any probing, a role for the councils were individuals who had or were serving on their council. Chairpersons experienced with the councils saw the council's role as identifying areas where there was need for change and acting on recommendations presented to them. Councils were not viewed as a threat to teacher involvement.

The philosophy behind involving the various stakeholders in decision-making was well articulated by one chairperson. In discussing the role of the school-based council, it was said: "I believe they have a lot to say about what is going to happen at [our] high school, and they should. Those parents, those students, that community, ought to know what they want to have happen."

There is a possible explanation for the lack of clarity of chairpersons about the change process. It is that

decentralization of decision making is rather new, and many issues have been presented to the high schools by the central administration. This agenda setting by the central administration may have been interpreted as responding to central administration questions, not as initiating change. Future opportunities of chairpersons to create important internal issues may aid them in better defining a change process for their school.

There are also explanations for chairpersons seeing themselves as informational links between the principal and department members. One principal spoke of high school teachers as being highly specialized in their content areas. I found some chairpersons also viewed their departments as a collection of specialists. This view supports the function of informational link as opposed to spokesperson. Principals emphasized the function of taking information to and from the teachers and did not describe chairpersons as spokespersons for departments. I would speculate that principals have attempted to maximize involvement of staff to underscore the movement to school-based management and are cautious about chairpersons being perceived as a new form of middle management.

The lack of a single vision of the change process of chairpersons in each school is not a criticism; it is a reflection that the processes of introducing changes in the

high school are themselves going through transformation. In talking about change, one chairperson commented: "Its all shared. Everything we do is shared. An idea runs through one group, out to another group and back again. I think we're quite open." Another chairperson observed that there are "a lot of groups that must be involved" in the discussion of new ideas. High schools are complex and, depending on the issue, there may be a variety of change processes that exist.

The position of the school-based council in the change process was not universally understood by chairpersons in either school. It also appears to be in the developmental stage, and its role is being defined. Insight was provided by one chairperson, an SBC member, who said: "I'm not sure that we've really made a lot of decisions on change yet. Last year we worked mostly on how to come to a consensus and how to work well with other people." It appears that preparation for participating in the change process is being provided to the SBCs as part of the movement to school-based management.

Problems Anticipated in the Implementation of Alternatives

Chairpersons, like administrators, did not express major concerns about the implementation of alternatives in their schools. However, their unwillingness to fully commit

to alternatives without conferring first with department members made identifying possible problems more difficult. I did not detect any attitudes to suggest they believed change would be difficult, if it was desired. Some possible problems were identified and these are described.

While all chairpersons saw benefit in having specific substitutes assigned to the high schools, they perceived two possible problems. One problem was that for a few days during the year there would be an excess of substitutes in the school. This chairperson quickly generated a solution; the extra substitute could be assigned to assist in the attendance center, a place where additional assistance was always needed. The chairperson also indicated that, given the opportunity, the school could identify other ways to use any unneeded substitute teachers. The other problem was the selection of the substitutes that would be assigned to the school. One chairperson thought the faculty would be interested in it if "they had some veto power" because of having had bad experiences with some substitute teachers.

Some support existed for the use of teacher associates to supervise students when teachers were absent. Each science department has a teacher associate assigned to it, but the associates' duties do not currently include student supervision. Adding this responsibility was viewed as problematic. The chairperson indicated that "only when the

associate was comfortable" with supervising students should the associate be given this responsibility.

The reassignment of students in foreign language classes to the media center when teachers were absent was an attractive alternative to one chairperson. She/he believed that return of monies to the department could fund the purchase of video tapes and computer software that would support the foreign language program. The identified problem was that it would be necessary to correlate the materials with courses and objectives so that they could be assigned appropriately when teachers were absent. This would require a committee of high school teachers representing the different languages to accomplish.

Feasibility of Using Alternatives in High Schools

The cost of alternatives to a centralized substitute teacher system is an essential consideration in determining their feasibility for use in high schools. Using teacher absenteeism as a basis, two high schools were examined to establish the economic feasibility of alternatives. In this section, I provide information on the need for substitutes and the cost of teacher absences. Information is provided to discuss whether or not alternatives provide the amount of coverage needed within existing cost constraints.

Comparison of Two Schools

Data from each high school are reported separately and are followed by a comparison of the two high schools. The largest high school is identified as School L and the smallest high school is identified as School S. Following the presentation of information on the two high schools, the cost of alternatives are provided.

School L

On the basis of 1990-1991 enrollment information, School L was the largest of five high schools in a district of 30,314 students. Its payroll roster listed 114 staff members with 100 included for the calculation of substitute teacher costs. Of the 180 student attendance days, no substitute teachers were needed on nine days. During the remaining 171 days there were 790 teacher absences. The cost of substitute teachers for short-term absences, based on a cost of $65 per substitute teacher per day, was $51,350. The teacher absence rate computed for the 100 teachers for all reasons for the school year was 7.9 days per year. This does not include absences of more than five days in duration. Table 12 shows the absences by quarter for all reasons for the 1990-1991 school year for the large high school.

Illness is the largest absence category for School L and accounts for 47% of the teacher absences. When

emergency leave and personal business leave are combined with illness, the reasons for 60% of all absences are identified. Absences for professional leave are anticipated absences and are the second largest category of absence. They account for another 35% of the absences. The remaining 15% of absences can be attributed to unpaid leave, leave to attend funerals, and leave because of the death of a relative.

Table 12

Large High School-All Short-Term Absences by Type by Quarter for 1990-1991*

Absence Type	Qt 1	Qt 2	Qt 3	Qt 4	Total
Illness	76.5	96.5	123	73.5	369.5
Emergency	12.0	13.5	14	7.0	46.5
Personal business	13.5	5.0	8	29.0	55.5
Funeral	6.0	1.0	3	2.5	12.5
Death	1.0	9.0	5	0.0	15.0
Military	0.0	0.0	0	0.0	0.0
Professional leave	41.0	66.5	87	83.5	278.0
Religious holiday	0.0	0.0	0	0.0	0.0
Jury duty	0.0	0.0	0	0.0	0.0
Unpaid leave	0.0	1.0	7	5.0	13.0
Total	150.0	192.5	247	200.5	790.0

*does not include absences greater than a five-day duration

School S

In 1990-1991, School S had the smallest enrollment of the high schools in the district. Its payroll roster listed 61 staff members with 49 included for the calculation of substitute teacher costs. Of the 180 student attendance days, no substitute teachers were required on 21 days. During the remaining 159 days there were 521.5 teacher absences. The cost of substitute teachers for short-term absences, based on a cost of $65 per substitute teacher per day, was $33,897. The teacher absence rate computed for the 49 teachers for all reasons for the school year was 10.6 days per year. This does not include absences of more than five days in duration. Table 13 shows the absences by quarter for all reasons for the 1990-1991 school year for the small high school.

Illness is also the largest single category of absence for School S. It represents the reason for 47% of the absences. Illness, emergency leaves, and personal business leaves, account for 58% of all absences. Professional leave accounted for the reason for another 35% of the absences. Collectively, leaves for illness, emergency, personal business, and professional development accounted for 93% of all absences. The remaining 7% were due to unpaid leave and leave for religious holidays, funerals, and the death of relatives.

Table 13

Small High School-All Short-Term Absences by Type by Quarter for 1990-1991*

Absence Type	Qt 1	Qt 2	Qt 3	Qt 4	Total
Illness	51.0	44.5	87.0	64	246.5
Emergency	7.0	5.5	5.5	6	24.0
Personal business	1.5	3.5	10.0	17	32.0
Funeral	1.5	2.5	1.0	2	7.0
Death	0.0	7.0	8.0	0	15.0
Military	0.0	0.0	0.0	0	0.0
Professional leave	25.0	30.5	48.5	77	181.0
Religious holiday	1.0	0.0	0.0	0	1.0
Jury duty	2.0	1.0	6.0	0	9.0
Unpaid leave	1.0	0.0	0.0	5	6.0
Total	90.0	94.5	166.0	171	521.5

*does not include absences greater than a five-day duration

Comparison of School L and School S

The proportion of total absences by absence category for the two high schools are the same for the categories of illness and professional leave. This means that 35% of the absences in each school were anticipated and there was some ability to plan for them.

Difference also exist between the two schools. The rate of absence per teacher differs between the two schools with School L consistently having a lower per teacher rate per absence category than School S. Most notable are the differences in the rate of absence because of illness and professional leave. The utilization of leave for illness in the large high school is 3.69 per teacher and 5 per teacher for the small high school. The per teacher use of professional leave is 2.78 in School L and 3.69 in School S.

The smaller school has proportionally more absences per teacher with a rate of 10.64 as compared with a rate of 7.90 for the large high school. The differences, based on the cost of substitute teachers, is equal to an expenditure of $178.10 more per teacher in School S as compared with School L. This totals a greater expenditure of $8,726.90 for the school year. Table 14 provides a more extensive comparison of absences within the two schools.

The author analyzed the distribution of absences by quarter and semester for each school and between the two schools. Table 15 shows the proportion and number of absences by quarter and semester for the two schools. An inspection of it shows that variation in teacher absences exists by quarter and semester. Figure 8 visually represents the absences of the two schools by quarter. School L has twice as many teachers as School S. The lack

of parallelism between the two schools in Figure 8 indicates the presence of variables other than school size that influence absenteeism and the need for substitute teachers.

Table 14

Comparison of Absences by Absence Category for School S and School L

Type of Absence	School S(N=49) N	%	rate / teacher	School L(N=100) N	%	rate / teacher
Illness	246.5	47.0	5.03	369.5	47.0	3.69
Emergency	24.0	4.6	0.48	46.5	5.9	0.46
Personal business	32.0	6.1	0.65	55. 5	7.0	0.55
Funeral	7.0	1.3	0.14	12.5	1.6	0.12
Death	15.0	2.8	0.30	15.0	1.9	0.15
Military	0.0	0.0	0.00	0.0	0.0	0.00
Professional leave	181.0	35.0	3.69	278.0	35.0	2.78
Religious holiday	1.0	0.2	0.02	0.0	0.0	0.00
Jury duty	9.0	2.0	0.18	0.0	0.0	0.00
Deduction	6.0	1.0	0.12	13.0	1.6	0.13
Total	521.5	100.0		790.0	100.0	

Table 15

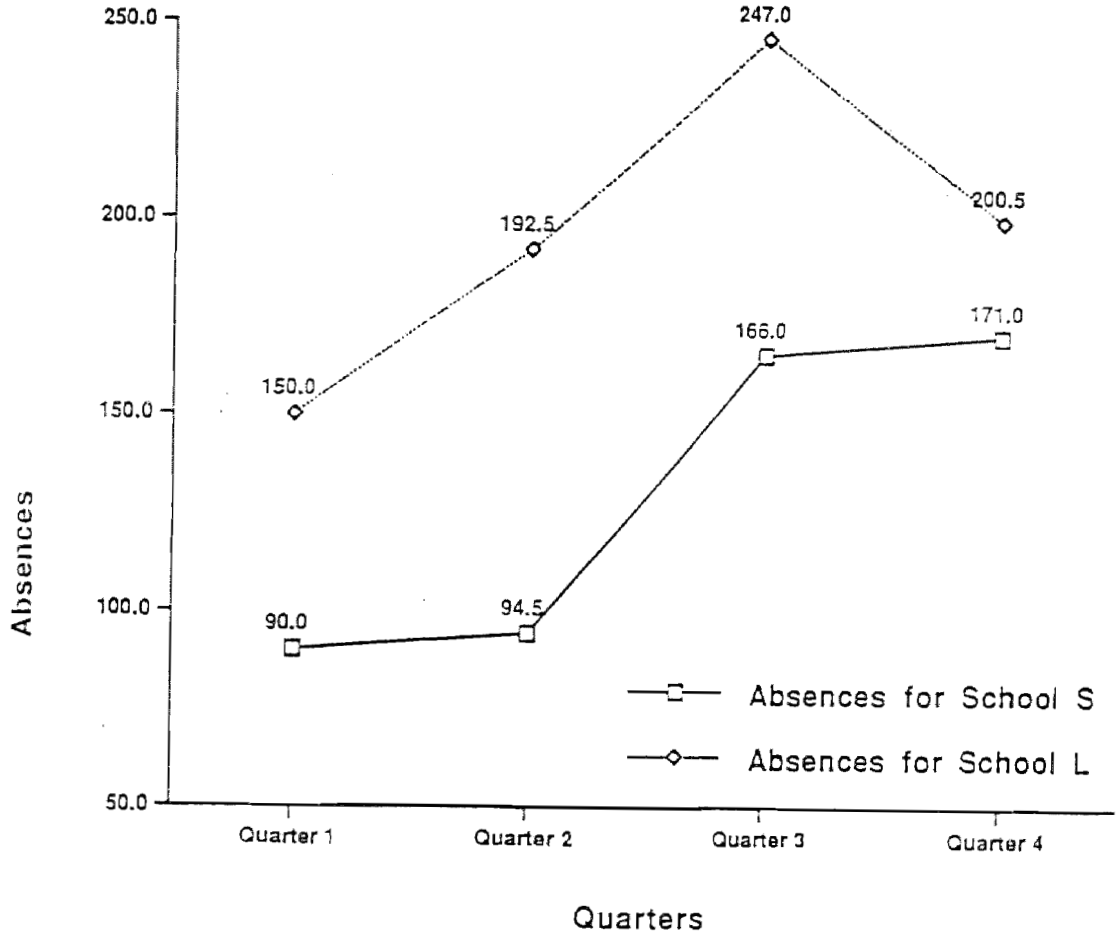
Proportion of Total Absences by Quarter and Semester for School S and School L

Time Period	School S (49 teachers) proportion	absences	School L (100 teachers) proportion	absences
Quarter 1	.1726	90.0	.1899	150.0
Quarter 2	.1812	94.5	.2436	192.5
Quarter 3	.3183	166.0	.3127	247.0
Quarter 4	.3279	171.0	.2538	200.5
Semester 1	.3538	184.5	.4335	342.5
Semester 2	.6462	337.0	.5665	447.5
1990-91 School year	100.00	521.5	100.00	790.0

Feasibility of Alternatives

Alternatives to the current substitute teacher system must be judged by educators as being feasible. Practical feasibility requires alternatives to be acceptable within a school (Table 4) and also meet the school's need for classroom coverage. The district studied, according to the human resources department, meets 90% of the requests of schools for substitute teachers. This local standard, higher than that reported in the literature (Meara, 1983), is used in this study.

Figure 8. Absences by quarter for School S (N = 49 teachers) and School L (N = 100 teachers) for the 1990-1991 school year.



The distribution of absences during the school year affects the possibility of alternatives independently meeting the criterion of 90% coverage for absent teachers. If absences are distributed evenly over the 180 student contact days, School L needs 4.5 substitutes each day and School S, 3 substitutes. Data provided in Tables 15, 16,

and 17 show that demand is not evenly distributed by day or quarter of the school year.

Economics, or cost, is another aspect of feasibility. Economic feasibility relates to the cost of using an alternative. The criterion used in this study is that an alternative must be no more expensive than the centralized substitute teacher system. The cost of coverage using the centralized system can be calculated rather easily; it is the number of teachers absent each day multiplied by $65, the cost of substitute teachers. Viewed as cost neutral is internal coverage of classes through regular teachers substituting as part of their assignment, substituting during their planning periods, and reassigning students to study halls or the library. Compensation by the district to the school or teachers within the school for internal coverage of classes is a redistribution of funds already allocated for classroom coverage of absent teachers, but not a greater expenditure.

Table 16

School S--Quantities and Frequencies of Need for Substitute Teacher

Substitutes Needed	Frequency of Occurrence by Days				
	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Total
0.0	10	8	2	1	21
0.5	0	4	0	1	5
1.0	11	9	1	7	28
1.5	2	4	1	2	9
2.0	5	4	5	11	25
2.5	3	1	4	3	11
3.0	2	6	8	4	20
3.5	3	1	2	0	6
4.0	2	2	4	8	16
4.5	2	2	4	2	10
5.0	3	1	7	1	12
5.5	0	3	1	0	4
6.0	0	0	1	2	3
6.5	0	0	0	0	0
7.0	0	1	1	2	4
7.5	0	0	1	2	3
8.0	0	0	0	1	1
8.5	0	0	1	1	2
9.0	0	0	1	0	1
10.0	1	0	0	0	1
15.5	0	0	0	1	1
Days per quarter	44	45	43	48	180
Absences per quarter	90	94.5	166	171	521.5

Table 17

School L--Quantities and Frequencies of Need for Substitute Teacher

Substitutes Needed	Frequency of Occurrence by Days				
	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Total
0.0	5	3	0	1	9
0.5	2	0	0	2	4
1.0	2	3	1	5	11
1.5	3	0	1	1	5
2.0	6	6	5	5	22
2.5	2	4	0	3	9
3.0	5	2	2	4	13
3.5	1	4	0	3	8
4.0	5	6	7	3	21
4.5	2	0	2	3	7
5.0	1	4	7	4	16
5.5	0	0	2	3	5
6.0	3	3	5	0	11
6.5	3	2	0	1	6
7.0	1	2	1	1	5
7.5	0	2	0	1	3
8.0	0	3	4	5	12
8.5	0	0	0	0	0
9.0	1	1	1	1	4
9.5	1	0	0	0	1
10.0	1	0	2	1	4
10.5	0	1	1	0	2
11.0	0	0	0	1	1
11.5	0	0	1	0	1
12.0	0	0	1	0	1
13.5	0	0	1	0	1
Days per quarter	44	45	43	48	180
Absences per quarter	150	192.5	247	200.5	790

Each of the eight alternatives generated by the focus group and used in the survey is reviewed for practical and economic feasibility. Table 18 lists the alternatives and indicates whether or not they are accepted by teachers or administrators, could provide coverage at the 90% rate and are no more expensive than the centralized substitute teacher system. An inspection of that table shows that no alternative is able to meet the requirements of practical and economic feasibility. A further review of the table shows that several alternatives do not meet 90% of the schools' needs for classroom coverage. This raises the issue of the possibility of alternatives successfully working in combination which will be discussed in the next chapter.

Necessary information when determining feasibility is the cost of alternatives and ability to meet the coverage needs of the schools. For that reason, the alternatives are discussed as they relate to those two variables. The similarity of some alternatives permits their grouping for the purposes of discussion.

Table 18

Acceptance, Coverage and Cost of Alternatives to a Centralized Substitute Teacher System

Item	Acceptance*	90% coverage**	Cost***
1. Substituting as part of teaching assignment	no	yes	greater
2. Departments allowed to not request substitutes	yes	no	neutral
3. Specific substitutes assigned to high schools	yes	no	neutral/ greater
4. Support staff to substitute	yes	no	neutral
5. Contract teachers assigned as substitutes	yes	no	greater
6. Teacher associates to supervise classes	yes	no	greater
7. No substitutes for selected classes, reassign students	no	yes	neutral
8. Planning time used for substituting, optional and with compensation	yes	undetermined	neutral

* mean of 3.25 for either teachers or administrators
** ability to independently cover 90% of the needs of the school
*** cost equal to or less than expenditures using the centralized system

High School Teachers Serving as Substitute Teachers

Two alternatives to the centralized substitute teacher system involved regular members of the instructional staff functioning as substitute teachers during the school day.

One alternative schedules substitute teaching as part of the teaching assignment. In the other alternative teachers would serve as substitute teachers, by choice and with extra compensation, during their planning periods.

The structure of the comprehensive high schools in the district is a seven-period instructional day with one period assigned for teacher planning. Assuming optimum staff scheduling, six teachers can cover for one absent teacher with no need for a substitute during the absent teacher's planning period. With optimum scheduling, that is, distribution of either planning periods or periods scheduled for substitute teaching throughout the day, the ratio of regular teachers required to cover for absent teachers would follow the pattern of 6:1, 12:2, 18:3, 24:4 and 30:5.

Using teachers within the school for coverage of absences, on days of greatest teacher absences, School L needs 36 teachers in the school substituting for their colleagues to reach the 90% coverage level for quarters one, two and four. The third quarter requires 42 teachers assisting to achieve 90% coverage. On days of greatest teacher absences, School S needs 24 teachers assisting during quarters one and two, 30 teachers assisting in the third quarter, and 42 teachers during the fourth quarter to provide a 90% coverage for teacher absences.

While this alternative initially appears capable of meeting the needs of the schools, a variety of problems are inherent with it. A major fallacy is the use of the 90% coverage rate reported by the human resources department. The centralized system provides this rate of coverage, but it demands that the high school provide the remaining 10%. Consequently, with use of regular staff, a 100% level of coverage is expected. Neither School L nor School S is able to provide enough staff to accomplish this on the days of the greatest number of teacher absences.

A second problem with this alternative as the single method of coverage for a school is the scheduling of teacher planning periods. In discussing this alternative, the principal of School S observed that planning periods are not evenly distributed across the school day. If teachers are scheduled to substitute as part of their teaching assignment, the timing of periods designated for substituting would become an important scheduling variable.

Using regular instructional staff in the high school for substituting is viewed as cost neutral as long as additional teachers do not need to be employed. If it were necessary because of scheduling to increase the number of teachers employed to permit internal coverage, added cost would quickly make this alternative economically impractical. The cost of adding teachers also eliminates

the opportunity to compensate teachers for substituting during their planning periods.

As a single alternative, the use of teachers assigned to the high schools to substitute for absent colleagues is not feasible. This alternative would require that almost all teachers choose to substitute teach during their planning periods, something that is unlikely to occur. It also assumes planning periods are distributed in a way that complements teachers covering for one another and interviews indicate that they are not distributed equally during periods of the day. Adding teachers to permit substituting as part of the teaching assignment, which would be necessary to achieve the necessary coverage, is cost prohibitive.

Options Given to Departments Not to Request Substitutes

One alternative to the centralized substitute teaching system is to give departments the option of not requesting substitutes when department members are absent. The feasibility of this alternative is related to department size, giving a clear advantage to some departments in the larger high school. This alternative cannot meet the total needs of either the large or small high school. It is cost neutral because no additional funding would be required.

Specific Substitutes Assigned to a High School

The assignment of specific substitute teachers to high schools was the favored alternative in the survey and also during interviews by administrators and chairpersons. Discussed earlier were the variety of benefits they believed to exist with increased permanency of substitutes in a school. Two alternatives reflected this approach. One involved using substitute teachers paid the daily substitute rate and the other involved teachers being paid the contract teacher rate.

The current daily rate for substitute teachers is $65. Based on a student attendance year of 180 days, the cost of one substitute teacher is $11,700. School L has 790 short-term absences and School S has 521.5 such absences. This equals $51,350 for the large high school and $33,897 for the small high school in short-term substitute teacher costs. This would provide 4.4 substitute teachers for School L and 2.9 for School S. For purposes of analysis, these have been rounded up to 4.5 and 3.

During the quarters of lowest and highest demand for substitute teachers, the coverage provided by this alternative is 80% and 70% for School L. Results are similar for School S. In the quarter with the lowest need for substitutes, 78% of the needs can be met and in the quarter with the greatest need, coverage exists for 65% of

the teacher absences. The alternative of having specific substitute teachers assigned to a school does not meet the criterion of 90% coverage of teacher absences. This alternative requires funds beyond those currently allocated for the centralized substitute teacher system to meet the needs of schools.

When use of full-time contract teachers as substitutes is considered, cost becomes an even greater problem. The minimum cost for a contract teacher for the 1991-1992 school year was $19,175 and benefits were equal to 28% of salary. This makes the total cost for the least expensive contract teacher $24,544. In contrast to substitutes paid the daily rate, this alternative reduces coverage for absent teachers to less than 12% for School L and 25% for School S during the quarters of greatest need.

Full-time Teacher Associates Assigned to Supervise Students

Full-time teacher associates are para-professionals. They may be persons with degrees, but they are not required to have formal training or experience. As a full-time employee, they receive benefits equal to 28% of their salary. Teacher associates are on a 195-day contract and paid a daily rate with additional pay for college hours and years of experience in the school district. Using a middle range daily rate of $48 per day, the cost of a teacher associate is almost $12,000. This is slightly more than the

cost of a substitute teacher paid a daily rate and working 180 days. Because the costs are similar, this alternative has the same shortcomings as the alternatives discussed above.

Support Staff to Substitute Teach

Support staff include the principal, vice-principal, counselors, and other certificated personnel assigned to the high school who do not have regular instructional responsibilities. School S has 12 professionals in that category and School L has 17. With the expectation that each person substitutes three days per school year, this alternative does not meet the criterion of 90% coverage for absent teachers. It is cost neutral.

Identification of Classes Where Substitute Teachers Would Not Be Used

The focus group assumed it is impossible to meaningfully replace classroom teachers in some classes. They argued that students in those classes could be reassigned to a study hall or library instead of having a substitute teacher. This alternative is cost neutral because it does not require additional funds. As a single alternative, it is rejected because it does not meet the criterion of 90% coverage on days of highest teacher absenteeism.

Summary

This chapter presented the results of the data analysis in four main areas: (a) alternatives to a centralized substitute teacher system, (b) acceptance of alternatives by students, (c) processes required for enactment of alternatives, and (d) feasibility of using alternatives in high schools.

Through the use of a focus group, it was possible to generate 10 proposed alternatives to a centralized substitute teacher system. Eight of the alternatives were presented by survey to teachers, administrators, and students to determine whether or not the alternatives were attractive to them. Some alternatives were attractive to the different groups. Teachers and administrators preferred having specific substitute teachers assigned to each high school; students preferred being assigned to a study hall or the library instead of having a substitute teacher. When administrators and department chairpersons were interviewed, there continued to be support for having specific substitute teachers assigned to each high school. Other alternatives had appeal to them, but not to the same extent. Chairpersons were interested in opportunities to gain revenue for their departments through methods of coverage other than using substitute teachers. However, they did not

believe that teachers would have great interest in giving up planning periods to cover for absent teachers.

Processes for enacting alternatives in the two high schools studied were identified by interviewing administrators and chairpersons. Similarity existed in their descriptions, but administrators had a clearer vision of how change would occur than did the chairpersons. Both groups stressed involvement of all teachers in the decision-making process. Department chairpersons served as an informational link to teachers, keeping them informed and taking their opinions back to the principal. Administrators and some chairpersons described a role for school-based councils in the process of change. Some chairpersons were unsure of the role that the councils would play in changing practices related to substitute teachers. Both groups, administrators and chairpersons, were positive about their school's ability to enact change.

Data on teacher absences for the two high schools were reviewed for the purpose of determining the feasibility of alternatives. Feasibility was defined as covering 90% of the school's need for substitute teachers and costing no more than the current system. Each alternative was reviewed independently for the ability to meet those requirements. No alternative met these criteria. Even though no alternative, by itself, met the criteria, there is the

possibility of using combinations of alternatives in high schools.

In the next chapter, I provide my conclusions about the use of alternatives in high schools. As part of my discussion, I present information on the feasibility and the processes for combining alternatives to the centralized substitute teacher system.

Chapter 5

SUMMARY, CONCLUSIONS, DISCUSSION, AND RECOMMENDATIONS

The purpose of this study was to investigate alternatives to the traditional practice in urban areas of using a centralized substitute teacher system, a system characterized by district-wide management, and assignment of substitute teachers with little involvement of schools in the process. I generated alternatives to that system by using a focus group and surveyed teachers, administrators, and students to determine if there was acceptance of any of the alternatives. Administrators and department chairpersons were interviewed about the alternatives and the processes that would occur in introducing change in their schools. Using data from the schools, the feasibility of each alternative was examined for ability to meet the criteria of coverage for absent teachers and cost restraints.

This is an exploratory study and attempts to determine if in educational practice there is reason to invest energies in designing an alternative to the traditional system. That system is characterized by control of the central office of a school district, including responsibility for recruiting, selecting, and assigning substitutes (Stoops et al., 1975). It is also a system with

limited instructional effectiveness, especially at the high school level (Clifton & Rambaran, 1987; Olson, 1971), and fails to meet 100% of the needs of schools (Meara, 1983). Teachers and administrators view the system as being instructionally ineffective and they encourage investigating alternatives to it (Caster, 1991).

This chapter includes useful information about the use of alternatives in place of a centralized substitute teacher system. I present my conclusions about the use of alternatives in high schools first, providing a foundation for the topics that follow. The current system of substitute teachers has endured because no alternative is as simple to use in large districts as the centralized system. Therefore, these alternatives are important because they offer other, more imaginative, and perhaps more economically beneficial ways of doing things. Four specific topics are discussed: alternatives to the centralized system, the economics of alternatives, processes of system change, and administrative practices and policy. In the discussion of alternatives, I organize those generated by the focus group into classifications for planning and introduce additional alternatives for consideration. The economics of alternatives considers the costs of using alternatives versus those of a centralized system. I introduce a concept that permits broadening the role of substitute teacher from

only covering for an absent teacher to benefiting the entire school. The section on processes of system change examines roles in change and raises questions about the place of educational beliefs and philosophy in making decisions within a school. Altering the current method of covering for absent teachers will require changes in administrative practices and policies. Issues relating to practices and policies needing change, or at least review, are identified.

As a result of this study, I have been able to conceptualize a substitute teacher system different from the centralized substitute teacher system that has prevailed. This model is proposed as a guide for understanding alternatives to centralized systems and a guide for decision-making. It is followed by recommendations for further research on the use of substitute teachers and alternatives to a centralized system.

Conclusions

I gathered information on two high schools, one with a student enrollment of 922 students and one with 1968 students. Information consisted of data on absenteeism converted to daily needs for substitute teachers during the 1990-1991 school year. From this, I estimated a maximum expenditure for substitute teachers and used it to evaluate the economic feasibility of alternatives. I interviewed

administrators and department chairpersons to discover actual interest in the use of alternatives and the processes necessary to implement them. Audio recording was used to supplement note-taking and I reviewed the tapes to better identify common themes and differences in views.

The interviews revealed an awareness of the shortcomings of the centralized system. Interest existed in both high schools in using alternatives generated by the focus group. The use of specific substitute teachers assigned to each school was the most attractive of the alternatives considered. The concept of returning monies to the high schools for coverage they would provide without using the centralized system was supported by department chairpersons and administrators.

The process for implementing change in the two schools was described by chairpersons and administrators in the same manner. The district's movement to school-based management with similar structures being mandated for all schools accounts for the similarity. It also gives some evidence of the district's success in that effort. Teacher and department involvement were deemed necessary to the process of determining which alternatives would be implemented. Previous experience with shared decision-making created positive expectations within the schools about the ability to effectively introduce change.

Analysis of data from the schools gives importance to the role of school-based management in selecting and implementing alternatives. Differences exist between the two schools in the need for substitute teachers that can not be attributed to school size alone. The distribution of absences during the school year for the two schools is different as is the use of professional leave. The survey of teachers and administrators of all high schools in the district about the use of alternatives revealed that attitudes about alternatives vary between schools and between departments. No single alternative met the requirements of coverage for absent teachers and cost.

From this investigation, I reached the following conclusions:

1. Alternatives to a centralized substitute teacher system have been identified which teachers and administrators wish to implement.

2. Differences exist between subject areas and high schools in preferences and ability to use alternatives.

3. Return of monies to high schools for implementing alternatives is a major motivation for adopting alternatives to a centralized system.

4. Teacher participation is necessary for selecting and implementing alternatives appropriate to each high school.

5. No single alternative to the centralized system meets the needs of high schools, but using combinations of alternatives seems very feasible.

6. High school students have low expectations for learning when the teacher is absent and the classroom climate created by the presence of a substitute teacher is negative, and even intimidating to some students.

7. Centralized substitute teacher systems continue to be necessary to meet the needs of some high schools.

The remainder of this chapter provides information that supports these conclusions and further clarifies the process of implementing alternatives to a centralized substitute teacher system.

Alternatives to a Centralized Substitute Teacher System

The literature does not describe planned alternatives to a centralized substitute teacher system. However, Meara (1983) and I (Caster, 1991) both identified actions taken when supply of substitute teachers does not meet the needs of schools. Discussion with the focus group and interviews with administrators revealed that administrators give consideration to methods of covering classes when substitute teachers are not available. The most commonly used method is assigning teachers during their planning periods to cover

classes. In the small high school, the principal maintains a list of teachers by period who can substitute when needed. In the large high school, teacher planning periods within larger departments are arranged to permit teachers to cover classes within their own department when no substitutes are available.

Because the literature does not describe other planned alternatives, I formed a focus group to generate alternatives. Alternatives were defined as planned methods of covering for absent teachers without using the centralized substitute teacher system. The purpose of this section is to review the alternatives generated and to classify them to aid in planning. Because some alternatives were more or less attractive to specific groups, some of the possible reasons behind the opinions are presented. In the course of the investigation, I discovered other alternatives not included in the survey that might have utility. I present these for consideration despite the fact that the focus group did not generate them.

Classification of Alternatives for Planning

The focus group generated 10 alternatives, 8 of which I included in the survey. The two that I did not include in the survey, use of students and community members, were excluded because the use of students would require the presence of an adult because of liability. Using persons

from the community would require considerable advanced planning by teachers. Neither suggestion received much attention from the focus group and I did not believe I could adequately present them in the context of a survey. The eight alternatives examined have been classified using two categories: (a) specific personnel assigned to high schools and (b) internal coverage.

Specific Personnel Assigned to High Schools

Three alternatives are included within this classification: specific substitute teachers assigned to a high school, contract teachers assigned to a high school, and teacher associates assigned to a high school for the purposes of student supervision. Survey results reflect that teachers, administrators, and students perceive benefits in having consistency in the teachers substituting in a high school. Chairperson and administrator comments during interviews are consistent with the finding of Clifton and Rambaran (1987). These researchers recommend increasing the experience of specific substitutes in a school as a method of reducing the dissimilarity between the ways in which substitutes and regular staff members perform. Clifton and Rambaran (1987) contend it is this incongruity in actions and expectations for students that cause substitutes to lack authority in the classroom and high school. I found teachers, administrators, and students to

be highly aware of this problem and they often cited it as the explanation for the ineffectiveness of substitute teachers.

While three alternatives are included within this classification, the use of teacher associates to supervise students received less acceptance than the alternatives that used certified teachers. It was attractive to administrators but not teachers. Review of teacher responses by subject area reveal that two sub-groups of teachers, language arts and social science teachers, accepted the use of teacher associates as an alternative. A variety of issues emerged as teachers and administrators considered the use of teacher associates. A major issue is uncertainty about the legality of using teacher associates and the functions they can perform. An explanation might be the emphasis of schools on appropriate certification and the very limited experience the high schools have had with teacher associates. Also, some teachers seem unwilling to share authority with non-teachers. The lack of acceptance of teacher associates might be attributed to the desire of teachers and administrators to maintain instruction in the classroom. There is a definite unwillingness to give up the appearance of maintaining instruction even when faced by situations where the respondents believe it can not be maintained. Or, rejecting the use of teacher associates may

be a way to avoid perceived encroachment of para-professionals at a time when funds are limited and schools are attempting to reduce costs.

The use of contract teachers as substitutes and specific substitute teachers assigned to schools is acceptable to teachers and administrators. The distinction between the two categories is essentially one of compensation. The contract teacher receives benefits and is placed on the salary schedule based on years of experience and the substitute teacher is paid a daily rate. The contract teacher costs considerably more. Administrators and chairpersons are very aware of the budget implications of using contract teachers. Teachers may have had the same thoughts because greater support is given to using daily-rate substitutes than contract teachers.

Internal Coverage

Internal coverage is the other classification of alternatives. It includes (a) teachers substituting as part of their assignment, (b) teachers having the option of substituting during planning periods with additional compensation, (c) selection of classes where substitute teachers would not be requested and students reassigned to study halls or the library, and (d) the use of support staff to substitute.

As shown earlier in Tables 4 and 7, the only method of internal coverage not receiving the support of either teachers, administrators, or a sub-group of high school teachers was substitute teaching as part of a teacher's regular assignment. Teacher comments indicate they believe substituting is aversive. Administrators seem to be aware of these feelings. Administrators also believe that insufficient numbers of teachers are assigned to their high schools for this to be feasible without major increases in class size.

Teachers and administrators acknowledge that having teachers cover for one another during planning periods is common practice when substitutes are unavailable. Generally, teachers believe that since they fill in during planning periods, it would be nice to be compensated. In written comments, some teachers predicted that compensation will attract teachers to substituting, but planning will be neglected. Interviews with chairpersons reflected the opposite; they believed that teachers would reject the opportunity to volunteer for substituting during planning periods so their own work could be done. So, in conclusion, this alternative received very mixed support.

Teachers are favorable toward requiring administrators and other certificated, but non-teaching staff, to substitute three days during the year. The administrators

are not. Vice-principals indicate that selecting days where this might be possible is difficult because of the unscheduled nature of discipline problems and other duties for which they are responsible. A few teachers recognize this as a problem in their comments. Some administrators report that they cover classes for teachers, but not for a full day. Counselors are reported to be excluded from covering classes on an emergency basis because of an unwritten school district policy. The belief that the position of counselors is protected can be attributed to a recent expansion of the K-12 counseling program in the school district. In times of limited funds, there may be a fear that having counselors perform this non-counseling duty would be used as evidence that the positions are not essential.

Identifying classes for which substitute teachers would not be requested when the regular teacher is absent was rejected by teachers as a group. Only language arts and science teachers disagreed. I believe the use of assignments that require independent reading and specialized laboratory activities in these content areas, as opposed to other areas, account for the differences in opinion. The general unattractiveness of this alternative is contradictory to the beliefs of teachers and administrators. They indicate that classes do exist where instruction is not

maintained when the regular teacher is absent. While I did not collect information on this issue, I see possible explanations for this paradox. The concept of a "substitute teacher" maintains the appearance that instruction and learning continue when the regular teacher is absent. Deciding not to request substitutes is a major break from tradition and requires formal acknowledgment that effective instruction is not continued when the teacher is gone. Also, schools do not have a base of experience to draw upon in providing student coverage without substitute teachers. Administrators were sensitive to space limitations in their schools that would prevent reassignment of students without other changes taking place at the same time. Some of the classes for which teachers mentioned qualified substitutes could not be found were vocal and instrumental music. Further, the size of those groups is usually so large that reassignment of students elsewhere is not practical. Administrators and chairpersons point out that only part of a teacher's assignment might lend itself to reassignment of students. That is, within a teacher's schedule, only part of the classes are so advanced that a substitute can not continue instruction. So, while reassignment might be feasible for the smaller or more advanced classes of a teacher, a substitute might be needed for larger or less advanced classes. This could be done, but it would require

more formal planning and organization than the current system which is just having a substitute teacher follow the absent teacher's schedule.

Impact of Attractiveness of Some Alternatives on Other Alternatives

The appeal of having specific substitute teachers assigned to a high school is so attractive to teachers and administrators, I believe that some of the other alternatives by comparison are less attractive. The alternative getting the attention of the two groups is assignment of specific personnel to the high schools. When the nature of the traditional system, including its shortcomings, is considered, this is a logical response. This alternative addresses weaknesses of a system made ineffective by substitutes not knowing the students or the school. It is also an approach that relies on the structure of the existing system, replacement of a teacher with another teacher. Even using teachers during their planning period to substitute is a mirror of the existing system.

Alternatives using forms of internal coverage requiring students to be reassigned or requiring new forms of coverage were generally far less attractive. I sensed during the interviews that without a frame of reference for how these alternatives would work, and none existed, teachers and administrators were uncomfortable affirming the use of those

methods. This is in spite of acknowledging that instruction in some classes is not maintained when the teacher is gone. This points up the caution of the groups in changing past practice very much. Or, it is a sign of the complexity of selecting classes for which substitutes would not be obtained and creating a method to supervise the students. The belief of teachers, administrators, and students that emerged during this study about the total futility of trying to continue instruction in some classes causes me to believe that this alternative is worth pursuing. Pursuing it within a high school will require both a great deal of study and searching for solutions and a willingness to ignore tradition.

Other Alternatives

Not included in the survey were two alternatives mentioned by the focus group: use of student leaders and the use of members of the community. Both are worthy of discussion as they relate to the climate of the school when the regular teacher is absent. An alternative not generated by the focus group is the use of student teachers to cover for absent teachers. It also is presented.

The use of students does not mean that students may replace absent teachers or be in a classroom without a supervising adult. The liability of the school prohibits delegating such authority to students. However, students

might be used to maintain the instructional nature of some classes. Administrators reported that designated student leaders permitted vocal and instrumental groups to practice when the teacher was absent. They hypothesized that this might also work for foreign language, mathematics, and physical education. The administrators assumed that this might be more true in the upper-level classes. The use of student leadership might make it possible to have teacher associates supervise selected classes, but maintain a low profile in doing so. Student leadership could help to maintain continuity in classes. One student wrote that an effective substitute "doesn't change the rules and goes by what the original teacher does." While substitute teachers do not know the classroom procedures, students do.

The use of members from the community as substitutes was mentioned in the focus group, but not included in the survey. One teacher's comment caused me to think that it may be worth considering as something that could be done occasionally: "Each teacher knows someone who can best teach his or her class. Must these substitutes be state certified? Schools are missing a vast pool of good experiences in non-certified people." One-third of teacher absences are for professional leave and, unlike absence for illness, there is advanced notice. The planned nature of absences for professional leave allows the selection of

persons who can complement the content of classes. The "guest teacher" from the community would not be expected to "be" the absent teacher. This alters the relationships between students and the adult in the classroom, possibly removing the stress experienced by students when substitutes change processes and procedures.

The use of members of the community as guest teachers has no significant cost benefit to the school, nor, would that be the intent. However, it could help to develop relationships between the school and the community and to increase the understanding of students about the application of content to real life. The standards for substitute teachers and teacher associates seem sufficiently broad to permit this. Also, the encouragement of schools to link instruction to real life coming from state and national educational levels supports such efforts (Iowa Business and Education Roundtable, 1991).

Focus group suggestions did not include the use of student teachers as substitutes, an alternative described by Soares (1988) in the literature. He describes the successful use of substitute teaching as the student teaching experience for graduate students in education. It might be possible to replicate the program at the undergraduate level, especially with some undergraduate programs requiring five years for completion. On a limited

and highly selective basis, high schools could create, in conjunction with teacher training programs, a student teaching program that also would help to meet the need for substitute teachers. A stipend could be paid to student teachers and they would have responsibility for some classes and some substitute teaching responsibility. The duration of the experience could be greater than typical student teaching.

The benefit to student teachers is economic compensation and participation in an experience that offers better preparation and makes them more competitive for employment. The benefit to high schools and the school district goes beyond the benefits of coverage for absent teachers. Emphasis on selection of students could be in areas of high teacher need, thus potentially creating a bond between the preservice teacher and the school district. There is a need for schools to increase the number of minority teachers (Jacullo-Noto,1992) and this approach might be useful in more aggressively recruiting them. The authority given to student teachers by state law is sufficiently broad for this approach to be used. Concern on the part of the teacher's organization would be minimal because it does not represent substitute teachers and this approach is not expected to have a significant impact on the overall need for substitute teachers.

Summary

There are planned alternatives to a centralized substitute teacher system that are attractive to high school teachers and administrators. Eight alternatives are examined and seven are viewed as attractive to either teachers, administrators or sub-groups of teachers. The most appealing alternatives are those that involve specific personnel being assigned to a high school. Within that classification, assigning specific substitutes teachers to schools is the most attractive. Alternatives using internal coverage are appealing, but, overall, acceptance is over-shadowed by the attractiveness of having specific substitute teachers assigned to a school. Additional alternatives exist that might have utility in high schools. It is possible that even other alternatives to the use of a centralized substitute teacher system exist that have not been identified.

Fundamental to an investigation of alternatives to the current system is whether or not teachers and administrators have an interest in change. I observed great interest and enthusiasm about the possibility of departing from the centralized substitute teacher system. Teachers and administrators are keenly aware of the limitations of the centralized system and express a desire to obtain greater benefit from the monies used to cover for absent teachers.

Economics of Alternatives

Any change from a centralized substitute teacher system to another system has fiscal implications. School districts already face budget constraints due to state deficits and local resistance to higher taxes; there is no indication that major new resources will be forthcoming (Taylor, 1992). System change must operate within the limits of existing resources or demonstrate benefits that can justify additional allocations of resources.

In this section I discuss the economics of the centralized substitute teacher system and the alternatives generated by the focus group. As part of the discussion the concept of cost-utility analysis is explained and applied to the alternatives. Lastly, the significance of professional leave as an important economic variable in the funding of alternatives is presented.

Alternatives Compared with the Centralized System

When only expenditures are considered, the centralized substitute teacher system is the most economical method of covering for absent teachers. Costs occur only when a substitute teacher is paid to replace an absent teacher. In an estimated 10% of the cases the burden of providing classroom coverage is assumed by high schools with no cost to the school district. Using a 10% rate of non-coverage

for the 1990-1991 school year, a figure provided by the school district, more than $8,500 was saved by having the two schools studied cover their own classes when substitute teachers were not available.

I have assumed funding of alternatives to be equal to 100% of teacher absences. This is the goal of the human resources department which manages the substitute teacher system. Since the intent of the centralized system is to provide this level of coverage and failure is due to a limited supply of substitute teachers, this is a reasonable assumption. However, there is no basis for a belief that adopting alternatives would be less costly for a school district.

In the previous section, the alternatives were grouped into two categories: specific personnel assigned to schools and internal coverage. Internal coverage of classes includes using support staff, having teachers substituting during their planning periods, or reassigning students to study halls. Internal coverage is cost neutral because flow of funds from the central office is a redistribution of funds already allocated for classroom coverage of absent teachers. Internal coverage would cease being cost neutral and become more expensive if more teachers were employed to permit substituting as part of the regular teaching assignment.

The category of assignment of specific personnel to a school contains alternatives that are and are not economically feasible. The use of contract teachers, estimated to have a minimum cost of $24,544, is not feasible. Contract teachers provide too little coverage to meet the demands of the schools studied and still be within total substitute teacher budget. The other alternatives, using specific substitute teachers assigned to high schools or contract teacher associates, cost about one-half as much as contract teachers. This lower cost makes these alternatives economically feasible as strategies to meet a portion of a school's needs.

The coverage provided by using specific substitute teachers or teacher associates is not enough to meet 90% of the needs of the schools examined. This method would require supplementing by either the use of internal coverage or assistance from the centralized system on days of high teacher absenteeism. However, specific personnel assigned to the high schools can meet a major part of the schools' needs.

Determining the number of specific staff to be assigned to substitute in each high school is important for using this alternative to the centralized system. High schools will be expected to avoid having personnel in excess of the need for substitutes and, as a result, exceed budget

limitations. A reasoned decision, always a professional judgment based on absence data from past school years, will be required. District-wide data are inadequate for this purpose. Distribution of absences, as indicated in Table 15 and Figure 8, is not the same for the two schools and there is variance between quarters of the school year. Useful data are being collected in the district, but they are not organized or stored in a way that supports decision-making in the high schools. Data collection and reporting will need to be refined to support the use of this alternative.

Cost-utility Analysis

Cost-utility analysis (Levin, 1983) is a concept relevant to a discussion of the economics of alternatives to a centralized substitute teacher system. According to Levin, cost-utility analysis "refers to the evaluation of alternatives according to a comparison of their costs and the estimated utility or value of their outcomes" (p 26). It is similar to cost-benefit analysis but differs in that it acknowledges that an absolute value cannot be placed on the return gained from an investment. Judgment is required to determine the value of the return.

The use of cost-utility analysis permits looking at alternatives to a centralized substitute teacher system in terms of the value offered to a school in a broader sense than just classroom coverage for an absent teacher.

Repeatedly mentioned by members of the focus group and teachers and administrators during interviews was the practice of substitute teachers arriving just before class in the morning and being "out the door with the students in the afternoon." This equates to approximately one hour less of service per day than a substitute teacher is paid to provide. Because of the transient nature of substitute teachers in a centralized system, it is not surprising that no serious effort has been made to capture this time for the benefit of the school. Principals have decided that on a day-to-day basis, the time required to explain and train substitute teachers to perform before and after school duties is not worth the investment of time required.

The use of specific substitute teachers or teacher associates would recapture the hour lost each day. Their assignment to a high school would make it possible to assign meaningful before and after school duties. However, there are days where no teachers are absent. School L had 9 such days and School S had 21 such days. These costs would be exceeding the budget allocation for substitute teachers unless the high school believes the value of the permanency of the personnel is sufficient to justify the added expense. Cost-utility analysis provides a way of viewing these possible costs in a manner that clearly justifies them or renders them inappropriate.

Any added cost must be balanced against the value of the benefits received by the high school. Teachers and administrators report that permanent substitutes could provide benefits not received from the current system. Possible services to the schools are monitoring halls before and after school and assisting with detention, clubs, academic tutoring, and grading student work. These services are not provided by the current centralized system. Further, because they do not need a planning period an additional period of service is available from specific personnel assigned to high schools. Generating useful activities for specific personnel assigned to high schools is not felt to be a problem. Administrators and chairpersons report that extra help can always be used in the attendance office and training can be provided.

The application of cost-utility analysis to substitute teacher systems provides a rationale for additional expenditures that occur when no teachers are absent. However, budget constraints may prohibit any new funding even if the added benefits of permanent personnel are recognized. In that case, two options exist.

The first option is using internal coverage to offset the costs of having substitutes in the school when no teachers are absent. This would require the central office and the high school agreement to trade unpaid internal

coverage for the days when there is a surplus of substitutes. Faculties in the district have participated in decisions on the staffing priorities for schools. The ultimate test of the value of the services provided would be the willingness of a faculty to continue to purchase the exclusiveness of substitutes for their school through contributing uncompensated internal coverage.

The second option relates to the scheduled school day of high schools in this school district. High schools and middle schools begin at the same time, but earlier than elementary schools. On the small number of days that high schools do not experience any teacher absences, the personnel assigned to the high school could be released to substitute elsewhere in the school district. This shifts the costs to another school, but still maintains the consistency of the substitutes in the high school on other days. This strategy requires canceling after-school duties or reassigning them to regular staff, but the frequency that this is needed seems small.

This option would require agreements with the department of human resources, but only a small amount of restructuring would be necessary. High schools know the need for substitute teachers by 7:00 a.m. or earlier. The registrar, usually the person who coordinates substitute assignments in the high schools, would only need to call the

substitute office to report unneeded substitutes. Upon reporting to the high school, unneeded substitutes could be sent to other schools in the geographic area. Substitute teachers often substitute at all levels of instruction in the district.

Role of Professional Leave

Professional leave is an anticipated absence known well in advance. Because it is expected, it provides the greatest opportunity to maintain quality instruction when the regular teacher is absent. It also plays a significant role in the economics of alternatives.

Absence for professional growth activities accounts for 35% of the absences in each school. Obviously, the school district has made a commitment to staff training and releases teachers during the school day for participation in inservice activities as well as granting leave for attending conferences. Any shift in policy regarding releasing teachers during the school day for professional growth experiences also affects the need for substitute teachers and the ability to pay for alternatives. Communication between the district and the high schools regarding professional leave policy is essential for selecting alternatives that are economically feasible.

Summary

When expenditures alone are considered, the centralized substitute teacher system currently used is less costly than other alternatives because it has a built-in savings factor equal to any unmet demand for substitute teachers. However, the intent of the school district is to meet 100% of the needs of schools for substitute teachers. Combinations of alternatives appear very feasible as a way of delivering services different from the present system. Variables such as school size, staff absence patterns, preferences for alternatives, and allotment of professional leave are significant factors influencing ultimate configuration of a design used by a high school.

The use of the concept of cost-utility (Levin, 1983) permits the value of the services of specific personnel assigned to the high school to be considered in conjunction with expenditures. Currently, less service is received from substitutes than is being purchased. Reasons for this include the amount of notice prior to assignment and the difficulty of assigning duties to transient personnel. Chairpersons and administrators have identified additional services that could be provided if substitutes were present during the entire working day and if they could be assimilated into the school program. Added costs can be expected if substitutes are assigned to a high school and no

teachers are absent, but options exist for justifying or avoiding those expenses.

Processes of System Change

Participants in the investigation described this centralized substitute teacher system as being relatively unchanged during the last 25 years. Changing a system that has been in place for that length of time is usually achieved with great difficulty. The purpose of this section is to discuss the attitudes of participants in the study about system change and how they envision the change process occurring. I also discuss considerations that I believe to be important in the transformation of a centralized substitute teacher system to one that is more dynamic and uses different strategies to cover for absent teachers. Two of those considerations relate to the vision of teaching and learning held by a school and the role of students in defining change.

Attitudes About Change

The longevity of the district's centralized substitute teacher system does not appear to reduce the interest of teachers or administrators in considering system change. In fact, just the opposite is seen. Central administration of the school district and the department of human resources encouraged and supported the investigation from conception

through completion. Prior to the completion of the study, I was asked to meet with the high school principals to share preliminary results from the investigation. Also, during my earlier study (1991), teachers and administrators of this district expressed strong interest in having alternatives to the current system investigated.

I observed an unexpected clarity and understanding by students, teachers, and administrators of the problem of substitute teacher ineffectiveness. Without criticism of specific substitute teachers, they articulated short-comings of the current system and obstacles faced by substitutes trying to be effective teachers. Problems in the system most often identified were the inadequate supply of substitutes and the lack of substitutes skilled in all content areas. Obstacles to instruction frequently mentioned were lack of knowledge of the school and an understanding of its routines and students.

If the limitations and problems have been understood, why then has there been no attempt to change the system? A major factor seems to be that solutions to the problem have not been exclusively under the control of either district management or the high schools. Neither part of the organization has had the capability of independently redesigning the system. Only by district management and high schools working together to restructure the centralized

substitute teacher system could the creation of a different system seem possible. This is not the usual method in which change is created in schools. Hall and Guzman (1984) report that most innovations in education are mandated by the central office; they do not begin with the individual school.

Another factor contributing to the longevity of the centralized system is the limited significance of the issue of substitute teachers in relation to other issues that have faced school districts and high schools during the last decade. School efforts have focused on increased standards, drug education, teen pregnancy, AIDES education, drop-out prevention, and implementing research on effective teaching and effective schools. But now shrinking educational dollars, greater concern for instructional accountability, and increased absences of teachers for professional training help to elevate the importance of substitute teachers and the cost of their services.

The shift from centralized management to school-based management creates the opportunity for change to occur. It shifts some responsibility to schools for planning school improvement and determining how resources can best be used. Just because there is agreement that substitute teachers are ineffective and schools are empowered to suggest alternatives does not insure that change will occur. The

return of monies to schools will be an incentive for innovation. Yet, according to Fullan and Miles (1992), an understanding of how to create and manage change within the school is needed for reform to occur.

Process for Change Perceived by Chairpersons and Administrators

The two schools are alike in their structures for introducing and managing change. The principals rely on department chairpersons to bring information from the teachers and to take information to them. Both principals stress the importance of the chairpersons in understanding and communicating the opinions of department members. As a group, the principal and the department chairpersons are the significant decision-making group in the two schools. Yet, decisions on changing the current substitute teacher system would not necessarily be made by the principals and chairpersons. Or, they would not make the decisions quickly. Chairpersons seem not to speak for departments and are reluctant to represent other department members without asking their opinions. A high level of staff participation in issues was something that administrators also desired. Both groups are willing to take the time necessary to adequately discuss possible changes prior to making a decision.

Each high school has a school-based council (SBC) in place. It includes teachers, students, parents, and community members. The role is advisory in nature, but the SBCs appear to have the added effect of causing departments and the school to define their educational goals and proposed changes well before seeking support. The SBC would be included in any attempt to implement an alternative to the current substitute teacher system. How it would be included, and at what stage, was not well defined. Varying views existed of the role of the SBC, with administrators all having a similar understanding of the SBC's role. Some department chairpersons believed that it had a role, but were unsure of its exact nature. One chairperson, also a member of the school's SBC, believed the role was still being defined because of the newness of the council and the infancy of school-based management in the school. No one perceived the SBCs as a threat to the involvement of teachers in important issues in the schools.

Changing the method of providing for substitute teachers in the schools could be initiated in a meeting of the department chairpersons and principal. However, chairpersons and administrators both stress that no decision would be made until it is discussed at the department level. Some chairpersons saw the issue worthy of discussion at a faculty meeting, giving everyone the opportunity to hear

different opinions. They appeared sensitive to possible negative reactions if teachers did not understand proposed changes nor have a voice in shaping decisions. The school-based council could perform various functions. It could assist in validating the need for investigating possible change, provide the opinions of parent, students, and community members about alternatives, or respond to recommendations. No one perceived the SBC's role as defining the changes that should be made in the current system.

The process of introducing change described by chairpersons and administrators appears straightforward and uncomplicated. They both described change processes based on consensus building. Neither group expressed reservations about the ability to make change or described the existence of significant obstacles. They appeared confident in their ability to introduce and manage any desired change. This attitude of confidence comes from two sources: the first source is the alternative they most favored, the assignment of specific substitute teachers to the high schools. In many ways it is not unlike the present system. If they had favored a more complicated alternative, like major use of internal coverage for absent teachers, the descriptions of the change process might have been different or more elaborate.

The second source of confidence in their ability to introduce and manage change comes from the experiences of the administrators and department chairpersons in the last few years. The school district is more than four years into movement from a centralized system to one which uses school based management. The school-based councils are part of that overall restructuring of schools. Individual schools have been given more responsibility in decision-making on the methods to achieve district and school goals. Accompanying the increased responsibility has been the decentralization of funds related to staff development, professional leave and public relations. Along with greater control over funds has come greater accountability. The school district has devoted significant energies to creating databases for each school that provide information on such things as achievement, attendance, and drop-out rate so schools can develop improvement plans, monitor progress, and report results to the SBCs and the central office. Such an active role in previous decisions influence how chairpersons and administrators perceived their ability to change the substitute teaching system used in their school.

Dissatisfaction with the current substitute teacher system is present in both schools and there are processes in place to bring about change. Yet, there are many obstacles to introducing change into the current system within the

high schools. Leadership for change must come from within the high schools because the central office is not capable of defining what would work in each school. The central office can only encourage and provide the opportunity for innovation.

Teachers must provide leadership for change if new ideas are to be implemented, especially if the ideas require personalizing to each school and the cooperation of other teachers. Adopting alternatives to the current substitute teacher system requires both personalizing of alternatives and internal cooperation of teachers. This is much more difficult than making decisions on issues presented by the central office. According to Hall and Guzman (1984), few teachers are innovators beyond that which affects their own classroom responsibilities. Chairpersons perceive themselves as informational links between the department and the principal, not as innovators. As school-based management matures, expecting innovation to come from within schools and not the central office, who will be the innovators?

Philosophy and the Change Process

The philosophy of teaching, learning, and students by teachers in a school can be expected to contribute greatly to decisions about alternatives to a centralized substitute teacher system. This was not part of the inquiry of this

study. However, through comments on the surveys and during interviews, it emerged as a potentially critical element behind any decisions that high schools might make. While they are interrelated, I have divided the issue into two parts: one pertaining to teaching and learning and one to students.

Vision of Teaching and Learning in the Change Process

How we envision teaching and student learning has a bearing on our systems of covering for absent teachers. The traditional system is predicated on substitute teachers replacing absent teachers. The literature does not reflect that teachers can be effectively replaced, nor do the opinions of students, teachers and administrators. Beckhard and Pritchard (1992), in their discussion of change, describe learning as a necessary part of the change process. This learning process includes: "'Unfreezing' oneself from currently held beliefs, knowledge, or attitudes" (p 14).

Examining issues that have been taken for granted is one way to begin "unfreezing." Prior to a high school even considering the merits of alternatives to the centralized system, I would recommend that departments examine what they believe can be achieved when the regular teacher is absent. Three questions are offered for such a dialogue: What aspects of instruction (review, practice, introduction of new content) can substitute teachers reasonably be expected

to perform with effectiveness and meaning to students? Are there courses where the content is so specialized, or substitute content specialists so unavailable, that substitute teachers can only be expected to supervise students without providing instruction? Are there courses that use equipment or materials that are sufficiently dangerous, or breakage so likely, that class should not be held when the teacher is absent?

There are no right answers to these questions. I would expect that teachers of different subjects would answer the questions differently. Whatever the answers, they should provide an informational base for a high school to use in evaluating alternatives.

Students in the Change Process

As I discussed the process of change with teachers and administrators, few mentioned the role of students in selecting alternatives. Yet, it is clear from the survey that students do have strong opinions and many of their conclusions about substitute teachers are the same as those found in the literature. Students generally believe that instruction is not meaningful when the teacher is absent. A school considering alternatives should consider the attitudes of its students. Students have the ability to empower or not empower substitutes to provide instruction. If they do not empower them, what are the reasons and what

can be done to empower substitute teachers who are prepared to teach?

A second student-related issue pertains to student self-concept, school climate, and substitute teachers. As students described effective substitute teachers they described forceful teachers who exercise power over classes to maintain order. This is what the students have learned that successful substitute teachers do; they exercise power and maintain order. In the same writings, students express anger at being intimidated, threatened, and not respected. As part of any deliberations on alternatives, educators might consider if there are ways to cover for absent teachers that can promote the values of cooperation, inter-dependence, and respect for others. If these are important goals of a school, any process used to cover for absent teachers should not detract or discredit their importance.

Summary

The structures for decision-making in the two schools studied are not unusual. Most high schools have departments and chairpersons; they meet with the principal. The empowering ingredient in these two schools seems to be their past experience in making decisions and allocating funds to support them. The adoption of alternatives to a centralized substitute teacher system, especially if internal coverage

is to be more than a minor component, will be very complicated. School size, absence patterns, attitudes of total staff, and attitudes within departments are variables influencing the discovery of workable alternatives for a high school. Participation of teachers in the discovery process and support for alternatives is needed if alternatives to the current system are expected to be successful.

Any process of changing the system used for covering teacher absences should not be limited to only issues of frequency of teacher absences and cost. The values of the educational community should be included in the discussion. An honest appraisal of what realistically can be achieved when teachers of different subjects are absent and how students will respond to different alternatives should be part of the discussion.

Policy and Administrative Issues in System Change

The use of alternatives to the centralized substitute teacher system requires change to occur within the school district. Existing policies and practices will need review and possible modification. At the very least, some discussion should occur to insure that policies and practices accommodate desired change. I attempted during interviews to identify issues that administrators and

chairpersons believed existed with the implementation of alternatives. Four issues emerged: return of monies to schools, compensation of teachers, labor laws, and mechanics of system change. My purpose is not to define appropriate administrative and policy responses to those issues, but to explain them adequately enough so that schools considering alternatives will be able to respond to them.

Return of Monies to Schools

The motivation of high school administrators and staff to study and adopt alternatives rests primarily on the ability to receive benefits. The use of internal coverage as an alternative hinges on the central office of the school district returning monies to high schools for coverage that they provide. The department of human resources has expressed a willingness to return monies to schools for the coverage they provide for absent teachers. No policies or procedures have been developed about how this will occur.

Chairpersons and administrators have interest in receiving funds for coverage they provide without using teachers from the district substitute pool. It is that incentive which stimulated interest in internal coverage and, if creativity and innovation occur, it will be the source of the energy for change. The school district is not reluctant for this to happen, but how should it be

structured? A list of questions related to this issue is provided.

1. Should the return of monies be equal to the daily rate of a substitute teacher?

2. Absences of one-half day is the smallest increment recorded on payroll records. Should there be a return of money when the internal coverage provided is less than one-half day?

3. What guidelines should exist for the use of monies or the reallocation of monies within high schools and who develops those guidelines?

4. Who maintains the official record of the amount of internal coverage provided in a high school and how is that used to activate payment? How often will payment occur?

With the use of school based management, one would hope that few restrictions would be placed by the district office on how monies are used within a high school. If that is the case, the high schools themselves will need to develop guidelines of their own. The high schools will need to address:

1. If monies are returned to the school and kept in a separate account, what will be the restrictions on the use of the funds and who will determine their use?

2. Assuming monies can be returned to departments for internal coverage, should there be some method of assisting

smaller departments who have less opportunity to generate funds through this method?

Compensation of Teachers

Compensation of teachers individually, as opposed to monies being returned to departments or the school, is a major policy issue. The current practice is that when student coverage is needed and substitutes are not available, administrators reassign teachers during their planning period to meet the needs of the school. Contractually, a principal has the authority to assign and direct staff with the only exception being a 30-minute duty-free lunch period. Assigning teachers to substitute during their planning period is not considered to be the district's method of covering for absent teachers. Principals are expected to request substitutes for teachers who are absent. Under the current system, there is no benefit to principals in assigning teachers to substitute during their planning period if substitutes are available. If anything, it would be contrary to the district's emphasis on planning and preparation for instruction. Principals assign teachers to substitute during planning periods to insure that students are supervised, but they are aware of the negative feelings that teachers have about doing it. To minimize the effect on morale, principals try to rotate the responsibility.

Compensating teachers was viewed as attractive to teachers and administrators in the survey and interviews. However, one of the principals opposed it on the grounds that it is already something that teachers are doing without compensation when circumstances necessitate. He believes that direct compensation of teachers would reduce any sense of contributing to the school, and, once implemented, would become a permanent contractual barrier to future change.

Additional compensation of teachers for covering classes during their planning period raises interesting contractual questions. If teachers are compensated for substituting during their planning periods, should they be compensated for participating in meetings called by administrators during planning periods? Will the amount of compensation for substituting during planning periods become a negotiated item? Will the compensation of teachers for substituting during planning periods reduce the authority of the administrator to assign and direct teachers during planning periods?

Labor Laws and Alternatives

The alternative which has the greatest attractiveness to teachers and administrators is the use of specific substitute teachers in a high school. With that alternative, specific substitute teachers would be assigned to a high school and report to that school each day. The

intent of the alternative is to enable the substitute to develop an understanding of the school, to become familiar with students, and to offer a more useful service than that provided by itinerant substitute teachers.

A purpose of this alternative is to create some permanency for the substitute teacher in a high school. Yet the alternative raises a critical question: At what point does a substitute teacher reporting to the same high school each day become a full-time employee with all of the rights and benefits of full-time employees? Even though the substitute does not replace the same teacher each day, does the process of reporting to the same school alter his/her status as a temporary employee paid at a daily rate?

This question requires a legal interpretation and school districts considering this alternative should seek one. However, even if there is a point at which substitutes legally become a regular employee, there still should be alternatives available to schools. Substitute teachers could be recruited for quarters or semesters of the school year and not the entire year. It would also be possible to recruit substitutes for specific days of the week. For example, one substitute teacher could work the first three days of the week and another substitute could work the last two days. Between them they would meet the needs of the school. This might be an attractive arrangement for some

teachers who would like to substitute, but not work full time.

Mechanics of System Change

A redesigned substitute teacher system creates a variety of new responsibilities for administrators and department chairpersons in the high schools. The centralized system eliminates their involvement in the recruitment, selection, and orientation of substitute teachers. Principals are especially desirous of a role in the selection of personnel if specific substitute teachers are to be assigned to their schools. Assignment of specific substitute teachers to high schools would cause high schools to have a more active role in selection and orientation. Also, chairpersons or administrators would need to define before and after school responsibilities and provide appropriate training and supervision. New roles, functions, and procedures related to having specific substitute teachers assigned to high schools would emerge and need to be defined within the high school.

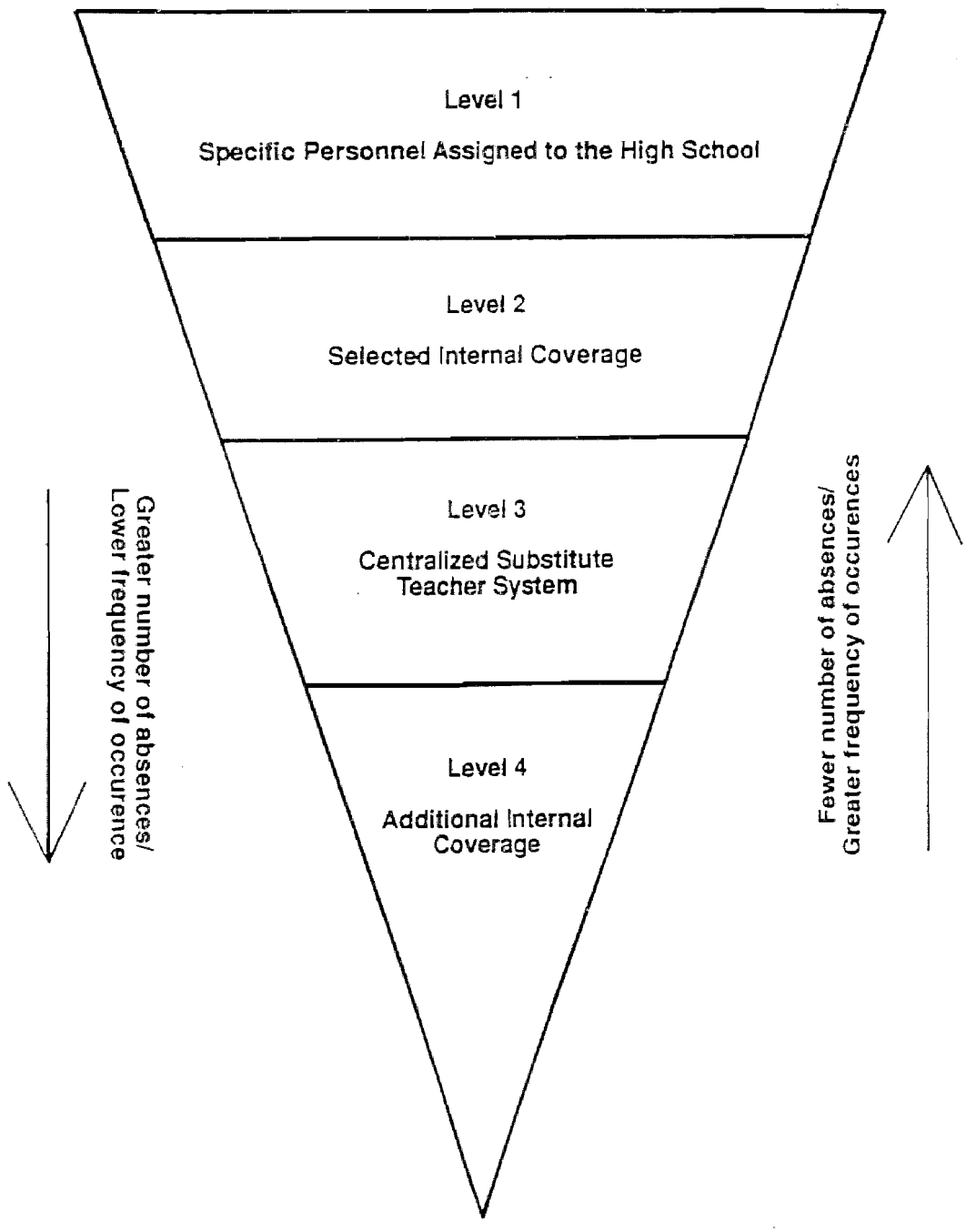
Proposed Model for a Substitute Teacher System

The limitations of the centralized substitute teacher system have been identified and described in this study. The system has a major strength; it is its simplicity. It is a basic exchange system, exchanging substitutes for

absent teachers. While it is ineffective instructionally, it is relatively easy to manage and requires few decisions once the system is in place. In contrast, a substitute teacher system based on using alternatives is complex and requires decision-making. In addition to requiring data on past teacher absences in a high school, there is evidence that teachers must be active participants in choosing alternatives for their school.

Models represent relationships and serve as tools for understanding abstractions. As this study neared completion, I began to perceive a model of a substitute teacher system for high schools based on the use of alternatives. The model (Figure 9) has four levels which I believe represent the preferences of teachers and administrators in this study. The purpose of the model is to promote understanding of how the components of a substitute teacher system can work together to meet the needs of a school. It is also intended to serve as a tool for discussion and decision-making within a high school as a plan for covering for absent teachers is developed.

Figure 9. Model of substitute teacher system using alternatives to a centralized substitute teacher system.



The model is presented as an inverted pyramid with the greatest amount of classroom coverage being provided at the upper levels. However, the model takes into account that there are limited days of unusually high rates of teacher absence; on those days high schools need access to other resources to meet the needs of the school. The model also recognizes decision-making within a school. Each level can be expanded or contracted based on the preferences of the school staff and the realities of the setting. In this study, I discovered that the larger high school had greater opportunity to use some methods of internal coverage than did the smaller high school. It was also discovered that preferences for alternatives differ between schools and also between different types of departments.

The four levels of the model are:

1. Level 1--specific personnel assigned

The first level of the model is the use of specific personnel in the high school assigned to cover classes when teachers are absent. The personnel are substitute teachers or teacher associates employed for supervising students when teachers are absent. Most participants in this study favored the use of teachers, but both are possible.

The absence record of a high school, including consideration of quarterly variations, is necessary to determine economic support for using assigned personnel.

Based on the expected absences and the funds they generate, the number of substitute personnel to be assigned to a high school can be determined. Adjusting the number of substitute personnel assigned to match expected seasonal variation in absenteeism is possible.

Financing of Level 1 comes from the school district's budget for substitute teachers. Days on which there are no teacher absences, or fewer absences than the substitute personnel assigned, create an added cost. High schools can purchase the added services through contributing unpaid coverage of teacher absences or purchase them from other school funds. Or, schools can release substitute personnel to substitute in other schools to avoid the added cost of having them without teachers being absent.

2. Level 2--selected internal coverage

Internal coverage for absent teachers includes teachers covering classes during planning periods, combining classes, and scheduling some teachers to substitute as part of the teaching assignment. It also includes selecting classes where students are reassigned to a study hall or library and substitute teachers never used in these particular classes.

Many variables affect the amount of coverage obtained from this level. The attitudes of the staff within a school are perhaps the most significant variable. Some faculties might wish to provide a greater amount of selected internal

coverage than others. Also, school size and physical facilities are variables. Larger high schools can create schedules that better permit teachers to cover during planning periods. The space that exists for study halls or within libraries are also factors that influence Level 2 coverage. Schools that have areas that can accommodate a temporarily displaced student population are more able to select classes where substitutes will not be used.

Financing of Level 2 comes from the school district's purchase of substitute services from the high school. Funds return to the high school based on the agreement with the school district on how they may be used. Level 2 is cost neutral; expenditures equal the cost of services which the centralized system would otherwise provide.

3. Level 3--centralized substitute teacher system

A centralized substitute teacher system is still necessary to assist high schools. This study has concentrated on absences of a short duration, those which are five consecutive days or fewer. The centralized system is still needed to provide long-term substitute teachers. It also assists high schools in meeting needs not covered by Level 1 and 2.

The frequency that Level 3 assistance is needed depends on the use of Level 1 and 2 alternatives in a high school. High school faculties choosing to use a large amount of

internal coverage would access fewer services from the centralized system than schools not doing so. Level 3 serves an important function because there is evidence that a few days of high absenteeism exist where Level 1 and 2 will not be able to meet all of the needs. Also, by preference or ability, some schools may use a very small amount of Level 2 coverage. Financing of Level 3 is provided by the school district.

4. Level 4--additional internal coverage

Level 4 is activated when the other levels of the model are unable to meet the needs of a school. In the past, Level 3, the centralized substitute teacher system, has not met all of the needs of schools. It is expected that there will continue to be days of great demand for substitute teachers where supply will not equal demand. Level 4 includes all options available to the principal: the use of teachers during planning periods, support staff, and reassigning of students to cover for absence. Level 4 is financed using the same methods as Level 2.

This level differs from Level 2. In Level 2, prior agreements have been made between the teachers and the principal and there is a planned response to the coverage of teacher absences. For example, in a team teaching situation, teachers may agree that no substitute will be requested when a team member is absent. With Level 4, there

is no prior agreement, the principal exercises his/her option of directing staff to ensure that students are supervised when a teacher is absent. Teachers are required to participate when needed at Level 4.

The literature has not provided direction on the use of planned alternatives to centralized substitute teacher systems. This model provides more than a listing of alternatives. It organizes alternatives in a manner that permits high schools to create and plan processes for covering for absent teachers. The model is flexible; recognizing that schools differ in preference and ability to use different alternatives and it accommodates those differences. The model also is dynamic. It assumes that changes, especially in preference for alternatives, may occur over time. Meadows (1990) indicates that all faculties do not have the same readiness for shared decision-making. Movement away from the centralized system (Level 3) requires faculty involvement and shared decision-making. Opportunity for teachers and departments to receive funds through internal coverage (Level 2) may motivate increased use of internal coverage as an alternative to the use of the centralized system.

This model places responsibility on high schools for data collection and decision-making. Data is needed to determine the feasibility of having specific substitute

personnel assigned to a high school. Information on past needs for substitutes is required along with a projection of needs for the current year. Decision-making is influenced by a combination of philosophy, preference, and ability to use different alternatives.

Recommendations for Further Research

In this exploratory study, I examined the acceptance and feasibility of alternatives to a centralized substitute teacher system. The results of the study indicate that there are alternatives acceptable to high school teachers and administrators. Because of cost and limitations in the amount of classroom coverage provided, no alternative by itself can replace the traditional centralized substitute teacher system. However, I found that alternatives in combination, or, in conjunction with the current substitute teacher system, have feasibility for use in urban high schools. Implementing alternatives in a high school will require an understanding of the absence patterns within the school and a willingness on the part of teachers to work together and depart from past practices. Without encouragement and cooperation from the central administration of a school district, using alternatives in high schools does not seem possible.

I conducted this investigation in a single urban school district in a midwestern state. Even with the opinions of teachers and administrators of five high schools, information from a large and small high school about teacher absences, and the perceptions of administrators and chairpersons about using alternatives in those two schools, this study is limited in scope. An appropriate strategy and sample for an exploratory study, it does not provide broadbased information for educators in other locations to use in considering their current practices. The acceptance and feasibility of alternatives to a centralized substitute teacher systems should be investigated in other school districts and other geographical areas.

Even with the limitations of the study, when the results are considered in conjunction with the literature, it can be concluded that the current system is not working beyond providing minimal supervision for students. Students, teachers, and administrators do not believe learning is occurring. None of the three groups seriously expect the instructional process to continue when the regular teacher is absent. They wish it would, but they recognize that conditions prevent it from happening. Economic incentives may be the motivation for educators to seek other ways of covering for absent teachers. Research

is needed to determine whether or not attitudes will change with the use of alternatives.

The problem of system change is more than an unwillingness to give up past practices. There is still information that is needed to make change successful. Identifying possible alternatives to the current system is only a beginning. There are five areas in which I suggest further investigation be done: data collection, administrative practices, professional climate, student learning, and the use of alternatives at other levels of instruction.

Data Collection

The use of the preferred alternative, specific substitute teachers assigned to high schools, requires that administrators understand the patterns of absenteeism within their high school. In this study, the data needed were not available and had to be created from past records. Can systems be created that will allow administrators to monitor the absence patterns of that part of their staff for whom substitute teachers are needed? Information systems currently focus on individual employees and the total absences for employee groups. This includes personnel who, when absent, do not need substitute teachers. The emphasis on total absences per quarter, semester, or year does not help to determine the daily need for substitute teachers.

Information on daily needs and how those needs change during the year is necessary for projecting the need for substitute teachers to be assigned to a high school.

The second data collection issue involves consistency of absence trends in high schools. I found that the two high schools studied were different in their rates of absences and the timing of those absences during the school year, but my data are from only one school year. It is not known if teacher absences are consistent enough to allow prediction of trends from one year to another. The more skillful that school administrators can become at predicting the absence trends within their school, the more planning they can do to maintain instruction and learning. The effectiveness of such efforts would need to be evaluated, another important area of study. However, without better information, high school principals will not be able to work with departments in an effort to minimize loss of instruction and learning because of teacher absences.

Administrative Practices

The uses of alternatives to the centralized substitute teacher system have major implications for administrative practices. I described some of the issues that I believed were important and that were identified by chairpersons and administrators. Yet, the change in the relationship between

the central office and high schools with the use of alternatives has not been examined and it should be studied.

An unknown aspect of this system change is the role of the negotiated contract and the use of alternatives to the centralized substitute teacher system. Teacher unions seem to have limited interest in substitute teachers or school district procedures regarding their use. If the substitute teacher system does change and monies are returned to high schools, will teacher unions want to negotiate alternatives that may be used, the amounts of monies to be returned to schools, and how the monies may be used? If so, will replacement of absent teachers become more important as a labor-management issue and reduce the ability of teachers within a high school to design their own system?

Professional Climate

Chairpersons and administrators in two high schools were involved in this study and they seemed to have interest in the use of some alternatives to the existing substitute teacher system. Will there be any change within those two schools?

From this study, I found that high schools differ in their opinions about alternatives and in their ability to apply them. I also found that departments are, in some important ways, unique from one another. Even though chairpersons and administrators stressed high involvement of

teachers in the change process, change will not be easy because the issues are complex. Who will become the leader if change occurs and what processes will they use? How will the internal cooperation of teachers, or lack of it, affect the ability of schools to use alternatives? The use of some alternatives is associated with a return of monies to high schools. Will the return of monies to a high school have the effect of encouraging more communication and cooperation between teachers, especially those within larger departments, or, will it be divisive within a high school?

Student Learning

I observed concern about the loss of student learning with the current substitute teacher system throughout the study. While not part of this investigation, the ultimate goal of the use of alternatives to the current system is improved learning for students. Some of the alternatives lend themselves to better maintenance of instruction because of better communication between substitute teachers and absentee teachers. Will that actually occur? If so, what methods of communicating instructional processes will be used and how well will they work?

In this study, I have addressed the acceptance and feasibility of using alternatives to the centralized substitute teacher system. Alternatives not included in this study may exist. There continues to be a need to

identify methods that can effectively maintain instruction when the teacher is absent. The content specialization within high schools makes this even more challenging to accomplish, but warrants study.

I found that students have low expectations for learning when the teacher is absent. I also found that the classroom climate created by the presence of a substitute teacher is negative, and even intimidating to some students. Will this change with the use of alternatives? Research should be done on methods of maintaining a positive classroom climate and promoting affective educational goals when the regular teacher is absent.

Use of Alternatives at Other Levels

I have examined the acceptance and feasibility of using alternatives at only the high school level. The literature indicates that middle and elementary schools experience the same types of problems with substitute teacher ineffectiveness as do high schools. However, the results of this study cannot be applied to those instructional levels. There is a need to determine what alternatives might apply to those levels and to investigate whether or not they are acceptable and feasible for use in practice. Because of differences in educational environments, there may be distinctly different needs and alternatives to the use of a

centralized substitute teacher system. The use of alternatives to the centralized substitute teacher system at these other levels need to be studied.

REFERENCES

Barrios, R., & Kirkland, S. (1978). Development and implementation of a substitute teacher program for the Sacramento City Unified School District. Sacramento, CA. (ERIC Document Reproduction Service No. ED 185 039)

Beckhard, R., & Pritchard, P. (1992). Changing the essence, the art of creating and leading fundamental change in organizations. San Francisco: Jossey-Bass.

Brophy, J., & Good, T. (1986). Teacher behavior and student achievement. In M. C. Wittrock (Ed.), Handbook of Research on Teaching (pp. 328-375). New York: Macmillan.

Case, E. J. (1986). Evaluation report: P.L. 94-142 evaluation, appraisal, and review substitute teacher program. Albuquerque, NM. (ERIC Document Reproduction Service No. ED 290 304)

Caster, J. A. (1991). Teacher and administrator perceptions of substitute teacher effectiveness. Unpublished research.

Clifton, R. A., & Rambaran, R. (1987). Substitute teachers: Survival in a marginal situation. Urban Education, 22, 310-327.

Deutchman, S. E. (1983). Why settle for a substitute. Clearinghouse, 56, 397-398.

Drucker, P. F. (1992). Performance accountability and results. National School Board Journal, 179(3), A4-A11.

Drury, W. R. (1988). Eight ways to make sure substitute teachers aren't babysitters. American School Board Journal, 175, 51.

Ebmeier, H., & Freeman, D. (1979). A study of the attitudes and the utilization of substitute teachers, 1978-79. Des Moines, IA: Department of Evaluation, Des Moines Independent Community School District.

Educational Research Service. (1981). Teacher absenteeism: Experience and practices of school systems. Arlington, VA: Educational Research Service.

Foldesy, G., & Foster, L. (1989). The impact, causes. and prevention of excessive teacher absenteeism. The Clearing House, 63, 82-86.

Fullan, M., & Miles, M. (1992). Getting reform right: What works and what doesn't. Phi Delta Kappa, 73, 745-752.

Garwood, S. G. (1976). Ten ways to prevent classroom chaos. Teacher, 94, 75.

Goodman, P. S., & Atkin, R. S. (1984). Absenteeism. San Francisco: Jossey-Bass.

Grier, T., & Creech, R. (1990). Super sub is not a sandwich. American School Board Journal, 177(2), 37.

Hall, G., & Guzman, F. (1984). Sources of leadership for change in schools. Paper presented at the Annual Meeting of the American Educational Research Association: New Orleans, LA, April, 1984. (Educational Research Information Service Document No. ED 250 815)

Herman, J. (1992). School-based management: Sharing the resource decisions. National Association of Secondary School Principals Bulletin, 76, 102-105.

Hill, S. T. (1982). You can't afford for teachers to be out, so take these steps now to stop absenteeism. Updating School Board Policies, 13, 1-4. (ERIC Document Reproduction Service No. ED 214 233)

Iowa Business and Education Roundtable. (1991). World-class schools: The Iowa initiative. Des Moines, IA: State of Iowa.

Iowa Department of Education. (1988). New standards for Iowa's schools, guidelines for interpretation. Des Moines, IA: State of Iowa.

Jacullo-Noto, J. (1992). Minority recruitment in teacher education, problems and possibilities. Urban Education, 26, 214-230.

King, H. A. (1978). A nomogram to assist in planning surveys of small (N < 2,000) populations. Research Quarterly, 49, 552-557.

Koelling, C. H. (1983). Substitute teachers-school policies and procedures in the North Central Region. Education, 104, 155-171.

Kraft, D. W. (1980). New approaches to the substitute teacher problem. National Association of Secondary School Principals, 64, 79-86.

Levin, H. M. (1983). Cost-effectiveness: A primer. (Sage University Paper Series on New Perspectives in Evaluation, Vol. 4). Beverly Hills, CA: Sage.

Lindelow, J., & Heynderickx, J. (1989). School-based management. In S. C. Smith & P. K. Piele (Eds.), School leadership: Handbook for excellence (pp. 109-143) (2nd ed.). University of Oregon: ERIC.

McCarther, W., & Clark R. (1991). How do principals and regular classroom teachers view the role of the substitute teacher? National Forum of Educational Administration and Supervision Journal, 7, 253-262.

McGreal, T. L. (1983). Successful teacher evaluation. Alexandria, VA: Association for Supervision and Curriculum Development.

McNulty, R. J. (1991). There's no substitute for a good substitute. American Secondary Education, 19(2), 31-33.

Meadows, B. (1990). The rewards and risks of shared leadership. Phi Delta Kappa, 71, 545-548.

Meara, H. (1983). Class coverage in the Chicago Public Schools. A study of teacher absences and substitute coverage. Chicago, IL: Chicago Panel on Public School Policy and Finance.

Morgan, D. L. (1988). Focus groups as qualitative research (Sage University Paper Series on Qualitative Research Methods, Vol. 16). Beverly Hills, CA: Sage.

Olson, M. N. (1971). Identifying quality in school classrooms: Some problems and some answers. New York: Report for the Metropolitan School Study Council.

Pellicer, L. (1984). Job satisfaction--its impact upon teacher attendance. Journal of the National Association of Secondary School Principals, 68(475), 44-47.

Reed, E. (1981). How to cut excessive absenteeism. American School and University, 53, 10-17.

Rundall, R. A. (1986). Continuity in subbing: Problems and solutions. Clearing House, 59, 240.

Senge, P. M. (1990). The fifth discipline: The art and practice of the learning organization. New York: Doubleday.

Simmons, B. J. (1991). Planning to improve the quality of the substitute teacher program. National Association of Secondary School Principals Bulletin, 75(531), 91-98.

Skidmore, D. (1984). We cut teacher absenteeism in half. The American School Board Journal, 171, 40-41.

Soares, L. (1988). The new look in field experiences. Substitute teaching as the field experience in teacher education. Paper presented at the Annual Meeting of the Association of Teacher Educators: San Diego, CA, Feb. 13-17, 1988. (Educational Research Information Service Document No. ED 290 740)

Stanley, S. (1991). Substitute teachers can manage their classroom effectively. National Association of Secondary Principals Bulletin, 75(532), 84-88.

Stoops, E., Rafferty, M., & Johnson, R. (1975). Handbook of educational administration, a guide for the practitioner. Boston, MA: Allyn and Bacon.

Taylor, J. (1992). Desperate for dollars. American School Board Journal, 178(9), 20-25.

Tompkins, J. (1988). Staff absenteeism in the Des Moines public schools, 1986-87. Des Moines, IA: Department of Evaluation, Research and Testing, Des Moines Public Schools.

U.S. Department of Education. (1991). America 2000, an educational strategy. Washington, D.C.

U.S. Department of Labor. (1991). What work requires of schools, a SCANS report for America 2000. Washington, DC.

Willerman, M., & McGuire, J. (1986). Substitute effectiveness in a school for behavior disordered students. Planning and Changing, 17, 233-238.

Appendix A

INTRODUCTORY LETTER AND BACKGROUND INFORMATION

March 12, 1992

Dear :

I am pleased that you will be able to be part of the group that is meeting on Monday, March 16th. We will meet at RVM School at 3:00 p.m. and be done no later than 4:30 p.m.

The purpose of the small group is to brainstorm alternatives to the use of a centralized pool of substitute teachers at the high school level. Or, simply stated, what ways exist, other than our current system, to cover classes when teachers are absent? A survey of teachers and administrators was conducted last spring and both groups indicated very strong interest in considering alternatives.

Since ours is an idea-generating group, we don't have to be restricted by issues related to cost, the existing master contract or implementation procedures. These are all very important, but they should not narrow our thinking about what might be effective. Certainly, before any change could be made, the teachers in the schools would have to be involved and such issues would have to be considered.

The project is being sponsored by the Department of Human Resources. However, as I mentioned in our conversation, I will be using the information that is generated as part of a doctoral dissertation at Drake University. The meeting will be video-taped to help me review information and to make sure of accuracy. It will be necessary for you to sign a form indicating your consent for participation.

To assist you, I have included a summary sheet providing background information and a description of the procedures that we will follow. I am looking forward to the meeting and appreciate your assistance.

Sincerely,

Jerry A. Caster

Enc.
CC: Human Resources

Background Information
for
Monday, March 16, 1992

General Purpose:

The purpose is to brainstorm alternatives to the use of a centralized district pool of substitute teachers that are used to replace high school teachers when they are absent. The type of teacher absence being considered is the one or two day absence. Excluded from consideration are absences of a long duration.

Desired Outcome:

The desired outcome is the creation of a list of alternatives to the use of a centralized pool of substitute teachers at the high school level. The list will serve as the basis for more detailed study of the alternatives available to high schools and the feasibility of those alternatives.

General Information

1. Olson (1971) compared teachers and substitute teachers at all levels using the Indicator-of-Quality scale. The finding was that substitute teachers performed at a significantly lower level than did the regular teachers. Also, the discrepancy between performance was greatest at the high school level.

2. Clifton and Rambaran (1987) studied substitute teaching through observation and interviews. Their finding was that substitute teaching was a marginal activity in regard to the purposes of the classroom and school. This conclusion was based on substitute teachers not having a source of authority because of not knowing the students, classroom procedures or procedures in the school.

3. The opinions of teachers and administrators about substitute teachers were obtained in the spring of 1991. At all levels there was agreement that substitute teachers were not instructionally effective. This belief was strongest at the high school level.

4. In the same survey, teachers and administrators indicated support for identifying alternatives to the use of a centralized pool of substitute teachers. Support was strongest at the high school level.

5. Research indicates that most teacher absences are of a one day duration.

6. With the current system, there are often times when the demand for substitute teachers is greater than the number of substitute teachers that are available.

7. Even when substitute teachers are available, they are not always qualified in the subjects areas where there is a need. This problem is greatest at the high school level because of the specialization of the courses.

8. The cost of a substitute teacher is $65 per day.

9. Regardless of alternatives available, substitute teachers will continue to be needed to meet the needs of schools when teacher absences are of a long duration.

Appendix B

INSTRUCTIONS AND TEACHER SURVEY

May 4, 1992

Dear High School Teacher/Administrator:

Teachers and administrators last spring were surveyed regarding their opinions about our substitute teacher program. In the survey, both high school teachers and administrators indicated that alternatives should be investigated to our current system of classroom coverage when teachers are absent for a short time, usually for one or two days.

Some alternatives have been identified to our current system for providing substitute teachers to schools. All of the alternatives would permit greater control at the building level on how classes are covered when teachers are absent. The alternatives were generated in a brain-storming session with high school teachers and administrators. We are now contacting teachers and administrators to get their opinions.

Prior to completing the survey, there is some background information that may be helpful to you. It is provided below.

*In the 1991 survey, high school teachers and administrators expressed the opinion that substitute teachers are generally not able to maintain continuity of instruction.
*Most absences are of a one day duration.
*Many absences are planned absences because of teachers attending conferences or district meetings.
*Certified teachers are not readily available as substitute teachers in all subject areas.
*There are days where sufficient numbers of substitute teachers are unavailable to meet the needs of all the schools.
*Alternatives to our current substitute teacher could return monies to high schools to be used for different purposes.

For many reasons, substitute teachers will continue to be needed in our district. However, whether or not high schools would benefit from some changes in our substitute teacher system is the issue. With school-based management, each high school is able to look at methods that will best serve its students and staff.

Results from the survey will be returned to each high school for the consideration of the staff. Completion of the survey is voluntary and respondents are not personally identified. I hope that you will complete the survey and return it to the Department of Human Resources by bag mail by May 13th.

Sincerely,
Personnel Director

Name of your high school_____
What is your primary teaching assignment?_(for teachers only)

Described below are possible alternatives to the use of substitute teachers for *short term coverage*, usually for a one or two day absence. No single alternative is necessarily intended to meet all needs for substitute teachers. This survey is attempting to determine the attractiveness of the concepts to you. You do not need to consider such things as implementation or funding. Instead, we are interested in what you think of the general idea presented.

Each alternative should be viewed independently of the others. Please circle the descriptor that best reflects your opinion of each alternative.

1. **substitute teaching as part of the teaching assignment**

With the 7 period day, staff members would be scheduled to serve as substitute teachers for one period of the day. This would mean five periods of instruction, one period of planning and one period of substitute teaching.

Very Attractive	Somewhat Attractive	Somewhat Unattractive	Very Unattractive	Undecided

2. **options given to departments on the request of substitutes**

Departments or teams would create their own alternative/s for covering for teacher absences instead of requesting a substitute teacher. Funds usually allocated for substitute teachers could be returned to the department or team for its use.

Very Attractive	Somewhat Attractive	Somewhat Unattractive	Very Unattractive	Undecided

3. **specific substitute teachers assigned to each high school**

Instead of substitute teachers being assigned from a district pool, each high school would have specific substitute teachers assigned exclusively to it.

Very Attractive	Somewhat Attractive	Somewhat Unattractive	Very Unattractive	Undecided

4. **support staff to substitute teach**

Building support staff (principal, vice-principals, counselors, work-experience instructors, consultants) would serve as substitute teachers three days during the year.

Very Attractive	Somewhat Attractive	Somewhat Unattractive	Very Unattractive	Undecided

5. **full time teachers assigned as substitutes**

Full time teachers would be assigned as substitute teachers to a high school. The teachers would perform other functions to benefit the school program before and after school and when not needed to supervise students.

Very Attractive	Somewhat Attractive	Somewhat Unattractive	Very Unattractive	Undecided

6. **full time teacher associates assigned to supervise**

Full time teacher associates would be assigned to supervise students when regular teachers are absent. They would perform other non-teaching functions to benefit the school program before and after school and when not needed to supervise students.

Very Attractive	Somewhat Attractive	Somewhat Unattractive	Very Unattractive	Undecided

7. **identify classes where substitutes teachers are not to be used**

It has been suggested that there are some subjects where the content specialization, processes used, or lack of qualified substitute teachers makes it impossible for instruction to be continued when the teacher is absent. For those courses, students could be assigned to a study hall (or other alternative) when the teacher was absent. Savings from not using substitute teachers could be returned to the high school.

Very Attractive	Somewhat Attractive	Somewhat Unattractive	Very Unattractive	Undecided

8. **option given to teachers to substitute during planning period**

Teachers would be given the opportunity to serve as a substitute teacher during their planning period and be paid additionally for the service provided.

Very Attractive	Somewhat Attractive	Somewhat Unattractive	Very Unattractive	Undecided

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9. You have been presented with 8 alternatives to the existing substitute teacher system. There may be alternatives that have not been identified that you believe are worth considering. If so, please describe:

10. Please provide any additional information/ideas you have that might be useful in better understanding the needs of your school for substitute teachers or in more effectively providing services.

Appendix C

INSTRUCTIONS AND STUDENT SURVEY

Dear Teacher:

The school district is doing a study of its substitute teacher program. The purpose of the study is to determine if there are ways that services from the Human Resources Department to our schools can be improved. I am also using the study as part of a dissertation I am doing at Drake University.

One aspect of the study is to collect the opinions of high school students about our substitute teacher program in general. The attached survey is not intended to be an evaluation of any substitute teacher and will not be used in that manner.

Please distribute the survey to students at a time during the class period that you feel is appropriate. However, you should allow at least 15 minutes for students to complete it. The survey explains to students that they may choose not to complete it.

Before distributing the survey, please read the following to the students.

The school district is doing a study about its substitute teacher program. As one part of the study, we would like to obtain the opinions of high school students about the substitute teacher program in general. It is not an evaluation of any specific substitute teacher, but a way to get your opinions about our overall program.

Your participation is voluntary and your responses and comments will be confidential. The results will be used as part of my dissertation at Drake University. You are not required to complete the survey, but your help would be appreciated.

Thank you for your help. Please turn the completed surveys into the office at the end of the day.

Sincerely,

Jerry A. Caster

Student Survey-Spring 1992

The school district is interested in the opinions of high school students about our substitute teacher program. Your opinions will be helpful as we work to improve services to you and your school. This survey is about your experience with substitute teachers in general and it is not an evaluation of a specific substitute teacher.

Completion of this survey is voluntary and all responses are confidential. We hope that you will share your opinions with us. Please continue if you are willing to participate in this survey.

Name of your school_____

Your current grade level_____

1. Generally, how meaningful is a class to you when it is taught by a substitute teacher?
   ___very meaningful
   ___somewhat meaningful
   ___somewhat unmeaningful
   ___very unmeaningful

2. Generally, how would you rate the way in which substitute teachers maintain order in the classroom?
   _____very effective
   _____somewhat effective
   _____somewhat ineffective
   _____very ineffective

3. Substitute teachers usually work in more than just your school. Would the quality of instruction from substitute teachers be better if they were more experienced in your building and you were more likely to know them? Circle the response that best represents your opinion.

YES UNDECIDED NO NO DIFFERENCE

4. When your regular teacher is absent, would instruction be better if another teacher in your building served as the substitute teacher? Circle the response that best represents your opinion.

YES UNDECIDED NO NO DIFFERENCE

5 How would you rate the learning that takes place when a class is taught by a substitute teacher?

___very good ___good ___acceptable ___poor ___very poor

6. It has been suggested that because of the specialization of some classes that students might go to a study hall or the library instead of having a substitute teacher. What go you think of the idea?
   ___ a very good idea
   ___ a good idea
   ___ undecided
   ___ not a good idea
   ___ a very bad idea

7. Think back to when you thought the substitute teacher was effective in replacing the teacher who was absent. What did he or she do? What was the class like?

8. Circle the word that best describes how often the substitute teachers you have had this year are like the person you described above.

always usually sometimes rarely never

Please share any of your ideas that would help us improve the effectiveness of the substitute teacher program in your school or to see how high school students see the role of substitute teachers.